DME SWITCHER

DFS-300MF DFS-300P DFS-300PMF DFS-500 DFS-500MF DFS-500P DFS-500PMF

DIGITAL CHROMAKEYER

DCK-500P

PROTOCOL MANUAL
REMOTE (9pin) CONNECTOR
1st Edition

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#### **TABLE OF CONTENTS**

OUTLINE	1
1. SERIAL DATA CONFIGURATION	
1-1.COMMUNICATION SYSTEM	
1-2. COMMAND CONFIGURATION	1
1-3. CONNECTION	2
2.COMMAND DESCRIPTION	3
2-1.VIEWING THE TABLE	З
2-2.CROSS POINT	4
2-3.TRANSITION	5
2-3-1.Transition Mode Selection	
2-3-2.Transition Type	
2-3-3.Auto Transition Start	
2-3-4.All Stop	7
2-4.DSK ON/OFF	7
2-5.WIPE	8
2-5-1.Wipe Pattern	8
2-5-2.Direction	8
2-6.FREEZE CONTROL	
2-7.SNAP SHOT REGISTER	
2-7-1.Configuration of Snap Shot Register	
2-7-2.Learn	
2-7-3.Recall	
2-7-4.Register Read	. 11
2-7-5.Register Write	
2-7-6 Group Read	

#### **OUTLINE**

The communication specifications when the DME switcher DFS-300 and DFS-500 series and the digital chroma keyer DCK-500/P (abbreviated as DFS and DCK hereafter) are controlled from an editing controller and computer (abbreviated as controller hereafter) via a 9-pin editor terminal are described below.

The communication protocol of the DFS series conforms to the Sony switcher protocol. However, this communication protocol does not support all the commands defined by the Sony switcher protocol. The commands that DFS supports and their application are explained next.

#### 1. SERIAL DATA CONFIGURATION

#### 1-1. COMMUNICATION SYSTEM

D-Sub 9-pin

Conforms to RS-422A.

Synchronous system: Start-stop

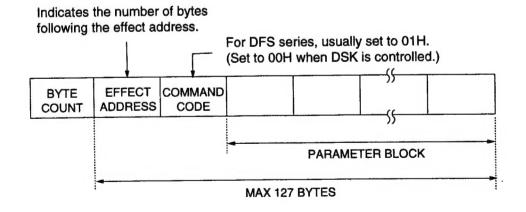
Baud rate: 38400 Character length: 8 bits

Parity: Odd Stop bit: 1

START BIT	D0 (LSB)	D1	D2	D3	D4	D5	D6	D7 (MSB)	PARITY	STOP BIT	(MAHK)
					l ——						 (SPACE)

1 START BIT + 8 DATA BITs + 1 PARITY BIT + 1 STOP BIT Odd Parity: The total of D0 to D7 and parity 1 is odd.

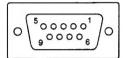
#### 1-2. COMMAND CONFIGURATION



#### 1-3. CONNECTION

**EDITOR CONNECTOR** 

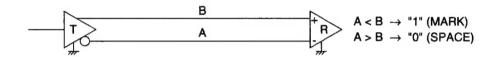
D-SUB 9pin (Female)



External View

Pin No.	Signal name	Function
1	GND	Frame Ground
2	XMIT-	Transmit "A"
3	RCV+	Receive "B"
4	GND	Receive Common
5	NOT USED	Space
6	GND	Transmit Common
7	XMIT+	Transmit "B"
8	RCV-	Receive "A"
9	GND	Frame Ground

"A" and "B" are defined as shown below.



T: Transmit

R: Receive

#### 2. COMMAND DESCRIPTION

The commands when the DFS-300 and DFS-500 series, and DCK-500 and DCK-500P (abbreviated as DFS and DCK hereafter) are controlled using a 9-pin editor terminal are described below.

The commands below are enabled for the following setting.

DFS-500 series: Set the editor select switch on the SY-172 board to BVE-900. DFS-300 series: Set the editor select switch on the SY-199 board to PVE-500.

DCK-500/500P: No setting is required.

A return code (ACK) is returned within 10 ms if a command is properly received when it is entered. Return code (ACK)

byte08 4 (R)

However, a return parameter (REGISTER READ or GROUP TALLY) is returned when a REGISTER READ command and GROUP READ command are sent.

To interrupt the effect, enter an ALL STOP command.

• Command 1: ALL STOP (EFFECT TRASITION)

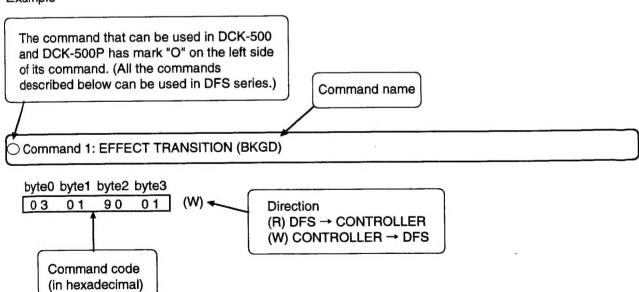
byte0 byte1 byte2 byte3
0 3 0 1 9 7 0 1 (W)

• Command 2: ALL STOP (DSK TRASITION)

byte0 byte1 byte2 byte3 0 3 0 0 9 7 0 2 (W)

#### 2-1. VIEWING THE TABLE

#### Example



#### 2-2.CROSS POINT

#### O Command 1: BKGD A (PGM) BUS

## byte0 byte1 byte2 byte3 0 3 0 1 8 0 X X (W)

Byte 3 (XX) status

0 1 : Video Input 1 0 2 : Video Input 2 0 3 : Video Input 3 0 4 : Video Input 4 Others : Internal Video

#### O Command 2: BKGD B (PST) BUS

## byte0 byte1 byte2 byte3 0 3 0 1 8 1 X X (W)

Byte 3 (X X) status

0 1 : Video Input 1 0 2 : Video Input 2 0 3 : Video Input 3 0 4 : Video Input 4 Others: Internal Video

**Function** 

: Selects the bus.

Command 1: Selects the cross point of a BKGD bus. Command 2: Selects the cross point of an FRGD bus.

Return code

: ACK

byte0

84 (R)

#### 2-3.TRANSITION

#### 2-3-1. Transition Mode Selection

#### O Command 1: EFFECT TRANSITION (BKGD)

byte0 byte1 byte2 byte3

0 3 0 1 9 0 0 1 (W)

#### Command 2: DSK TRANSITION

byte0 byte1 byte2 byte3

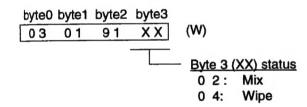
0 3 0 0 9 0 0 2 (W)

Function

: Specifies the effect transition or DSK transition.

#### 2-3-2. Transition Type

#### ○ Command: TRANSITION TYPE



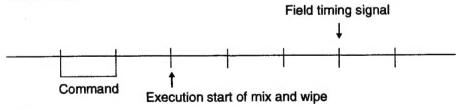
Function

: Selects the effect type.

Remarks

: The execution timing of Auto Transition Start varies depending on the effect type as

shown below.



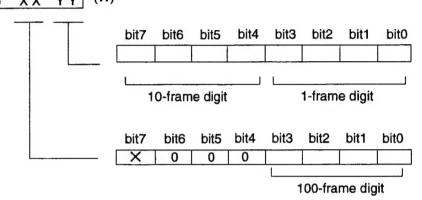
Return Code

: ACK

byte0 8 4 (R)

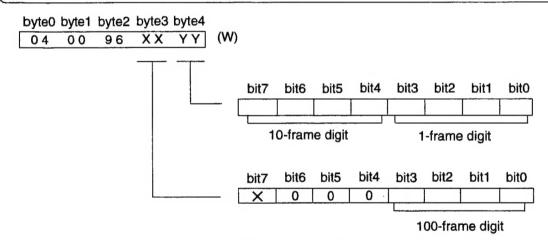
#### 2-3-3.Auto Transition Start

# O Command 1: AUTO TRANSITION START (EFFECT) byte0 byte1 byte2 byte3 byte4 0 4 0 1 9 6 X X Y Y (W)



Byte 3(XX) and byte 4(YY) represent the transition time in units of frames (decimal).

#### Command 2: AUTO TRANSITION START (DSK)



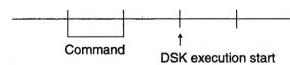
Byte 3(XX) and byte 4(YY) represent the transition time in units of frames (decimal).

**Function** 

: Transition start

Remarks

: The execution timing of DSK is as shown below.



Return code

: ACK

byte0 84 (R)

#### 2-3-4.All Stop

○ Command 1: ALL STOP (EFFECT TRANSITION)

byte0 byte1 byte2 byte3

0 3 0 1 9 7 0 1 (W)

Command 2: ALL STOP (DSK TRANSITION)

byte0 byte1 byte2 byte3

0 3 0 0 9 7 0 2 (W)

Function : S

: Stops the effect in execution.

#### 2-4.DSK ON/OFF

Command1: DSK ON

byte0 byte1 byte2 byte3

0 3 0 0 D A 1 0 (W)

Command 2: DSK OFF

byte0 byte1 byte2 byte3

0 3 0 0 9 A 1 0 (W)

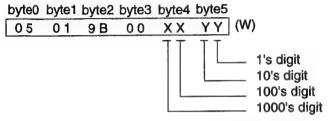
Function

: Turns on and off DSK.

#### 2-5.WIPE

#### 2-5-1.Wipe Pattern

#### O Command: WIPE PATTERN



Byte 4(XX) and byte 5(YY) represent the pattern number in decimal.

(Example)

The pattern number of Mix is 1080, and that of Cut is 1059.

**Function** 

: Sets the wipe pattern.

Various effects can be set (including the 3D effect) by entering the pattern number.

Return code

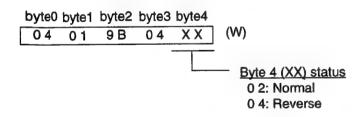
: ACK

byte0

84 (R)

#### 2-5-2.Direction





Function

: Sets the wipe direction.

Return code

: ACK

byte0

84 (R)

#### 2-6.FREEZE CONTROL

O Command 1: FREEZE ON

byte0 byte1 byte2 byte3

03 14 80 00 (W)

Command 2: FREEZE OFF

byte0 byte1 byte2 byte3

03 14 80 01 (W)

**Function** 

: Sets the field freeze or frame freeze on the control panel to ON in advance. The freeze operation of a BKGD image can be turned on and off irrespective of the effect execution when the next command is sent from a 9-pin connector.

Remarks

: (For DFS-500 series)

Pattern number 9973 is set using the PATTERN/KEY PAD button on the control panel. After that, the freeze operation of an FRGD image can be controlled using the above command only when the effect of an animation type is set. To return a BKGD image to the freeze mode, enter pattern number 9971. During the power-on sequence and power reset, the system is initialized so that the BKGD image is frozen.

(For DFS-300 series)

Basically, same as the DFS-500 series.

In the DFS-300 series, the BKGD freeze and FRGD freeze can be selected by the pattern number described above or the setup menu. (For more details of the setup menu, refer to the Additional Functions of the DFS-300/300P (Operating Instructions.)

#### 2-7. SNAP SHOT REGISTER

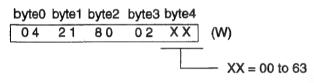
#### 2-7-1. Configuration of Snap Shot Register

The DME switcher of DFS series has 100 snap shot registers of Nos. 00 to 99 (20 snap shot registers of Nos. 0 to 19 for DCK-500 and DCK-500P). One snap shot register consists of 16 groups. The number and size of groups used vary depending on the switcher model or the type of a parameter memorized in the snap shot. In this case, 16 groups are not all used. (In the DFS series, groups 1 and 2 or groups 1 to 4 are used.)

To upload or download the contents of the snap shot register in DFS and DCK to the controller, transfer data in units of this group. Therefore, the controller first issues a GROUP READ command to the DFS and DCK, views the contents of the group tally from the DFS and DCK, and specifies a valid group number so as to read the contents of snap shot data. To fetch the contents of the snap shot register that uses four groups (groups 1 to 4), the contents are read four times for each group.

#### 2-7-2.Learn

Command: LEARN



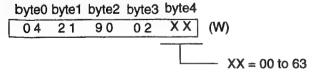
Byte 4(XX) represents the snap shot number in hexadecimal.

**Function** 

: Registers the snap shot.

#### 2-7-3.Recall

O Command: RECALL

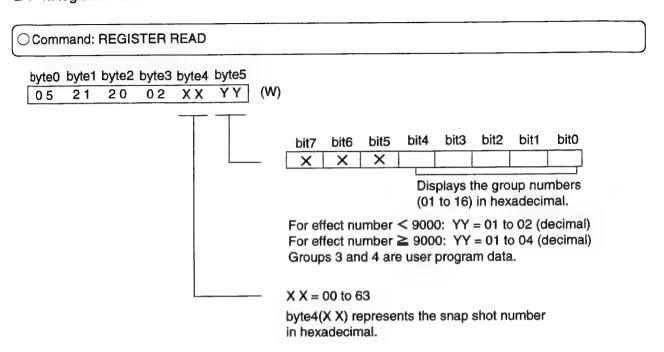


Byte 4(XX) represents the snap shot number in hexadecimal.

**Function** 

: Calls the snap shot.

#### 2-7-4.Register Read



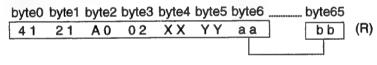
**Function** 

: Reads the contents of the snap shot register.

DFS or DCK returns the return parameter (REGISTER WRITE) when a REGISTER READ command (the snap shot number is specified by byte4 and the group number is

specified by byte5) is issued to DFS or DCK.

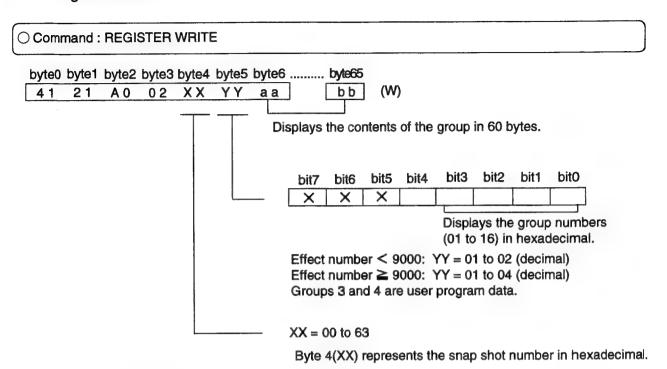
Return parameter: REGISTER WRITE



Displays the contents of the group in 60 bytes.

The contents of byte4 (XX) and byte5(YY) are the same as a REGISTER READ command.

#### 2-7-5.Register Write

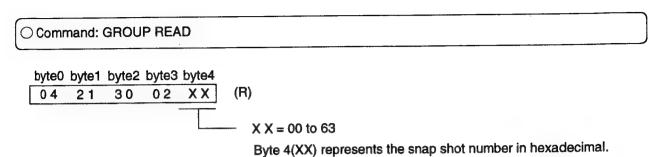


#### **Function**

: Writes the contents of the snap shot register. (The snap shot number is specified by byte 4, and the group number is specified by byte 5.)

#### Note

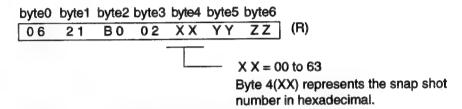
During write operation, data should be sequentially sent from group 1.



**Function** 

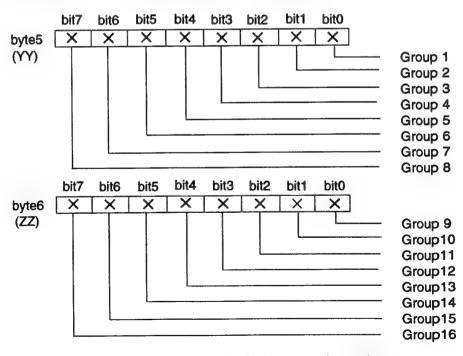
: Checks the block configuration of snap shot data. DFS or DCK returns the return parameter (GROUP TALLY) when a GROUP READ command (the snap shot number is specified by byte 4) is issued to DFS or DCK.

Return parameter: GROUP TALLY



Byte 5(YY) and byte 6(ZZ) indicate the valid group contained in the snap shot register that is specified by byte 4(XX).

For effect number  $\leq$  9000: Byte 5(YY) = 03, Byte 6(ZZ) = 00 For effect number  $\geq$  9000: Byte 5(YY) = 0F, Byte 6(ZZ) = 00

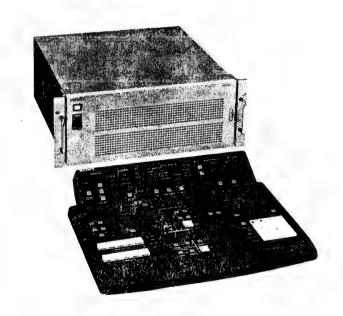


X = 1 indicated the valid group contained in the snap shot register.

DME SWITCHER

## DFS-500 DFS-500P

**SERVICE MANUAL** 



#### SAFETY CHECK-OUT

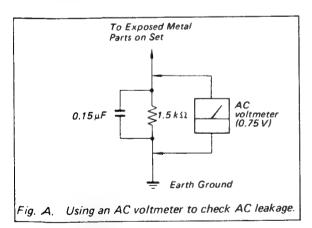
After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

#### LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA. Leakage current can be measured by any one of three methods.

- A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments
- A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
- 3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



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#### **TABLE OF CONTENTS**

#### 1. SERVICE INFORMATION

1. Removal of Cabinet1-1
2. Boards Location1-3
1-3. Printed Ciucuit Board Function1-5
1-4. Replacement of Board1-5
1-4-1. Plug-in Board Removing/Inserting1-5
1-4-2. Board Replacement1-6
1-5. Replacement of Switching Regulator1-9
1-5-1, Primary Circuit and Electric Shock1-9
1-5-2. Switching Regulator of Removal1-9
1-6. Replacement of DC Fan Motor1-9
1-7. Replacement of Main Parts on Control Panel 1-10
8. Rack-Mounting1-11
1-8-1. When Using RMM-30
( optional accessary)1-11
1-8-2. In Cases When Other Than RMM-30
is Used1-12
1-8-3. BKDF-503 Installation1-13
1-9. Fixtures/Mesuring Instruments1-14
1-9-1. Fixtures1-14
1-9-2. Use of Extension Board1-15
1-9-3. Mesuring Instruments1-15
1-10. Connect of Supplied Power Cord1-16
11. Matching Connector/Cable1-16
-12. Input/Output Signals of Connector1-17
1-13. Explain of Switch/Indicator/Volume1-24
1-14. Notes on Spare Parts1-30
1-14-1. Notes on Spare Parts1-30
1-14-2. Replacement of Chip Parts1-30
1-14-3. Removal of PLCC IC1-31
1-14-4. Replacement of Backup Battery1-32
1-14-5. Replacement of Fuse1-32
15. Timing Chart1-33
1-15-1. System Timing1-33
1-15-2. Timing of Title and DSK (Video Phase) 1-34

#### 2. DIAGNOSTIC

2	1. Flow Chart	2-1
2-2	2. Check Mode	2-2
	2-2-1. Countermeasures for Error Messages	
	2-2-2. Backup Memory Warnings	2-3
	2-2-3. Control Panel and Process Unit	
	Synchronization Check	2-4
	2-2-4. Display Confirmation of ROM	
	(IC14/KY-223 board) Version	
	of Control Panel	2-4
	2-2-5. Display Confirmation of ROM	
	(IC1, IC2/SY-172 board) Version of	
	Process Unit System Control	2-5
	2-2-6. Display Confirmation of ROM	
	(IC3, IC4/SY-172 board) Version of	
	Process Unit Effect Control	2-5
	2-2-7. Display Confirmation of ROM	
	(IC5, IC6/SY-172 board) Version of	
	Process Unit Effect Data 1	2-6
	2-2-8. Display Confirmation of ROM	
	(IC7, IC8/SY-172 board) Version of	
	Process Unit Effect Data 2	2-6
	2-2-9. Communication Check between Control	
	Panel and Process Unit	2-7
	2-2-10. Parity Check of ROM	
	(IC14/KY-223 board) of Control Panel	2-8
	2-2-11. RAM (IC15/KY-223 board)	
	Check of Control Panel	2-9
	2-2-12. RAM (IC59, IC60, IC61, IC62/	
	SY-172 board) Check of Process Unit	2-9
	2-2-13. Light Check of Control Panel LED	2-10
2-3	3. Checking Knobs, Levers and Buttons on	
	Control Panel	2-13
	2-3-1. Checking Knobs, Levers and Buttons on	
	Control Panel	2-14

#### 3. ELECTRICAL ALIGNMENT

3-1. Adjustment Sequence	3-1
3-2. Adjustment Preparations	3-2
3-2-1. Tools/Measuring Equipments	3-2
3-2-2. Connection	
3-2-3. Built-in Color Bars	
3-2-4. Layout of Adjustment Controls	3-6
3-3. DA-63 Board Adjustment	3-7
3-3-1. GEN Lock Adjustment-1	
3-3-2. GEN Lock Adjustment-2	3-8
3-3-3. INT SC Frequency Adjustment	3-10
3-3-4. INT SC Phase Adjustment	3-12
3-3-5. Clamp Phase & Width Adjustment	
3-3-6. B.B Out's SC Leak Balance Adjustment	3-16
3-3-7. Moduration Axis & B.B Burst Balance	
Adjustment (FOR EK ONLY)	3-17
3-3-8. B.B Output Gain Adjustment	
3-3-9. B.B Burst Phase & Width Adjustment	
3-3-10. Key Out Gain Adjustment	
3-3-11. PGM Out Component Y Gain Adjustment	
3-3-12. PGM Out BLK Phase & Width Adjustmen	t 3-25
3-3-13. PGM Out Component R-Y Gain	
Adjustment	3-26
3-3-14. PGM Out Component B-Y Gain	
Adjustment	
3-3-15. Y/R-Y Delay Adjustment	
3-3-16. Y/B-Y Delay Adjustment	3-31
3-3-17. Composite SC Leak Balance Adjustment	3-32
3-3-18. Composite Y Gain Adjustment	3-34
3-3-19. Moduration Axis Adjustment (FOR UC ONLY)	2.26
3-3-20. Composite C Gain Adjustment	 2-27
3-3-21. Composite Burst Balance Adjustment	5-57
(FOR EK ONLY)	3-30
3-3-22. Composite Burst Level Adjustment	
3-3-23. Y/C (S) Y Gain Adjustment	3-42
3-3-24. Y/C (S) C Gain Adjustment	3-44
3-4. AD-76 Board Adjustment	3-46
3-4-1. Component Clamp Level Adjustment	3-46
3-4-2. Component Y Level Adjustment	3-54
3-4-3. Component Chroma Level Adjustment	
3-4-4, W HD Phase Adjustment	
3-4-5. Component Y/C Delay Adjustment	
3-4-6. Y/C Input Y Level Adjustment	
3-4-7. Chroma Decoder Clock Frequency	
Adjustment	3-70
3-4-8. Y/C Chroma Level Adjustment	3-72
3-4-9. Y/C Input Y/C Delay Adjustment	3-76
3-4-10. APC Lock Adjustment	
3-4-11. Composite Y Level Adjustment	
3-4-12. Composite Chroma Level Adjustment	3-87

#### 4. BLOCK DIAGRAMS

OVERALL Block4-1
Overall Block
AD-76 Block4-2
A/D Converter
FM-29 Block4-3
Frame Synchronizer
MY-54 Block4-4
Field Memory
PU-78 Block4-5
Address Operation
DA-63 Block4-6
D/A Converter
SY-172 Block4-7
System Control
CONTROL PANEL Block4-8
Control Panel
5. SCHEMATIC DIAGRAMS
5. SCHEWATIC DIAGNAWS
PROCESS UNIT
AD-76 Board5-3
A/D Converter
FM-29 Board5-17
Frame Synchronizer
MY-54 Board5-29
Field Memory
PU-78 Board5-35
Address Operation
DA-63 Board5-41
D/A Converter
SY-172 Board5-51
System Control
CN-573 Board5-55
Connector Board
MB-385 Board5-57
Mother Board
CONTROL PANEL
KY-223 Board5-59
Function Key
KY-225 Board5-65
Switch
Switch
FRAME5-69
Frame Wiring

#### **BOARD LAYOUTS**

#### **PROCESS UNIT** ^D-76 Board ......6-2 A/D Converter и - 29 Board .......6-4 Frame Synchronizer Y-54 Board ......6-6 Field Memory PU-78 Board ......6-8 Address Operation A-63 Board ......6-10 D/A Converter SY-172 Board ......6-12 System Control V-573 Board ......6-14 Connector Board MB-385 Board ......6-16 Mother Board CONTROL PANEL KY-223 Board ......6-18 Function Key 7-225 Board ......6-20 Switch RAME......6-21 AC-111 Board (For EK) Line Filter KY-226 Board Positioner LE-55 Board Power Indicator VR-135 Board Location Control Title Control DSK (Down Stream Keyer) Control VR-136 Board Edge/Trail/Shadow Control VR-137 Board Mattes/BKGD Control VR-138 Board Effect Control

#### 7. SEMICONDUCTOR PIN ASSIGNMENTS

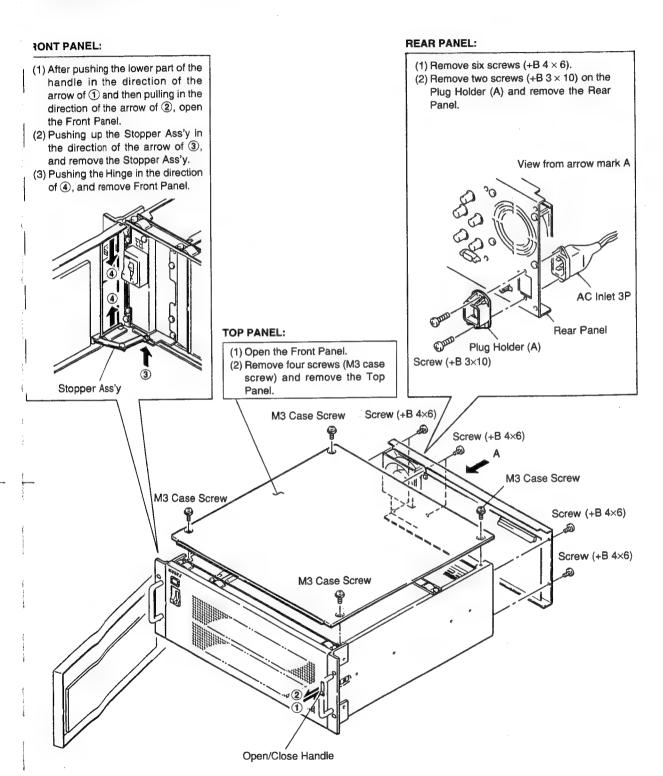
SEM	IICONDUCTOR INDEX	7-17
IU		フクフ
THA	NSISTOR	7 20 7 20
DIOI	DE	/ -30
8. S	PARE PARTS	
8-1.	Notes on Spare Parts	8-1
8-2	Exploded View & List	8-2
8-3.		8-9
0 0.	Capacitor	8-9
	Resistor	8-9
	AC-111 Board	8-10
	AD-76 Board	8-10
	AD-76P Board	8-21
	CN-573 Board	8-31
	DA-63 Board	8-32
	DA-63P Board	8-38
	FM-29/FM-29P Board	8-44
	KY-223 Board	8-47
	KY-225 Board	8-52
	KY-226 Board	8-54
	LE-55B Board	8-54
	MB-385 Board	8-54
	MY-54 Board	8-55
	PU-78 Board	8-57
	SY-172/SY-172P Board	8-59
	VR-135 Board	
	VR-136 Board	8-61
	VR-137 Board	8-61
	VR-138 Board	8-62
	_	0.00
	Frame	8-62
	Harness's Child Parts	
	Packing Materials & Supplied Accessories	8-63
Ω_Λ	Optional Fixtures	8-63
0-4.	Optional i Ixtures	

## SECTION 1 SERVICE INFORMATION

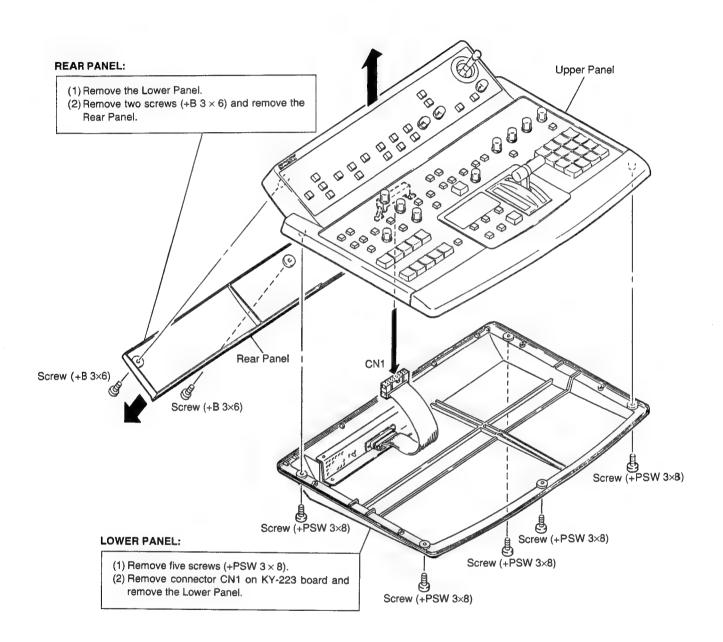


#### 1-1. REMOVAL OF CABINET

PROCESS UNIT>



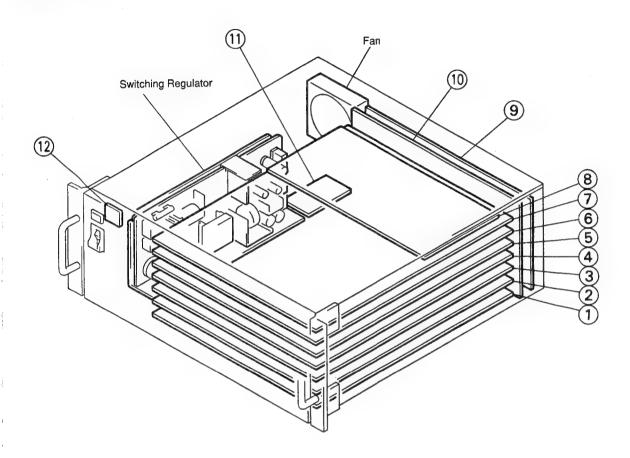
#### <CONTROL PANEL>





#### 1-2. BOARDS LOCATION

#### PROCESS UNIT>



1. AD-76 Board : A/D Converter SY-172 Board : System Control
 FM-29 Board : Frame Synchronizer
 PU-78 Board : Address Operation
 MY-54 Board : Field Memory

5. VE-25 Board : Lighting and Trail (option)

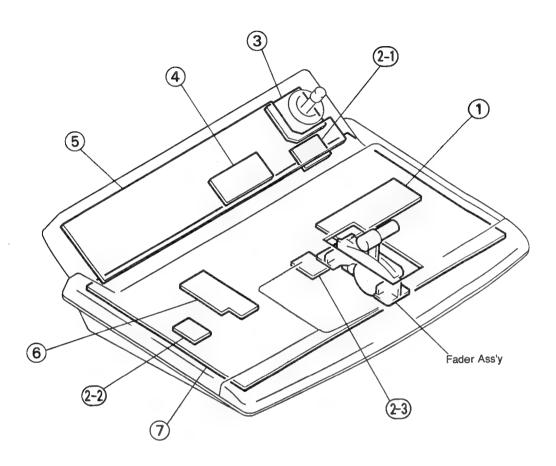
7. DA-63 Board : D/A Converter

8. DK-5 Board : DSK (Down Stream Keyer) (option)

9. CN-573 Board : Rear Panel Connector

0. MB-385 Board: Mother board 1. AC-111 Board : Line Filter (for EK) 12. LE-55 Board : Power Indicator

#### <CONTROL PANEL>



1. VR-138 Board: Effect Control 2-1. VR-135 Board: Location Control 2-2. VR-135 Board: Title Control

2-3. VR-135 Board: DSK (Down Stream Keyer) Control

KY-226 Board : Positioner
 VR-136 Board : Edge/Trail/Shadow Control

5. KY-225 Board : Switch

6. VR-137 Board: Mattes/BKGD Control

7. KY-223 Board: Function Key



## 1-3. PRINTED CIRCUIT BOARD FUNCTION

) "SP Code" means Supply Code.

2 "PCB" in the SP Code column means Printed Circuit Board, "MCB" in the SP Code column means Mounted Circuit Board.

#### <PROCESS UNIT>

3OARD	CIRCUIT FUNCTION	SP CODE
AC-111	Line Filter (for EK)	O(PCB)
<b>\D-76</b>	A/D Converter	O(MCB)
ON-573	Rear Panel Connector	O(MCB)
DA-63	D/A Converter	O(MCB)
OK-5(*1)	DSK(Down Stream Keyer)	U
FM-29	Frame Synchronizer	O(MCB)
_E-55	Power Indicator	O(PCB)
MB-385	Mother Board	O(MCB)
VIY-54	Field Memory	O(MCB)
PU-78	Address Operation	O(MCB)
SY-172	System Control	O(MCB)
√E-25(*2)	Lighing and Trail	υ

#### CONTROL PANEL>

30ARD	CIRCUIT FUNCTION	SP CODE
KY-223	Function Key	O(MCB)
KY-225	Switch	O(MCB)
KY-226	Positioner	O(MCB)
VR-135	Location Control Title Control DSK(Down Stream Keyer) Control	O(PCB)
VR-136	Edge/Trail/Shadow Control	O(PCB)
VR-137	Mattes/BKGD Control	O(PCB)
VR-138	Effect Control	O(PCB)

NOTE: (\*1) DK-5 Board is Optional Board; BKDF-502.

(\*2) VE-25 Board is Optional Board; BKDF-501.

#### 1-4. REPLACEMENT OF BOARD

#### 1-4-1. Plug-in Board Removing/Inserting

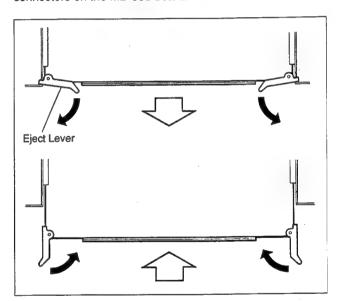
NOTE: In more than two seconds after turning the power on the Process Unit OFF and remove or insert the Plugin boards definitely (AD-76, DA-63, FM-29, MY-54, PU-78 and SY-172 boards). (If the board is inserted in a state of turning the power on, the fuse on the board has run out and the board can be not used.

#### **Plug-in Borad Removing**

Pull up the eject levers on the board in the direction of the arrow, and then remove the board from the connectors on the MB-385 board.

#### Plug-in Board Inserting

The eject levers pull up as shown in the figure, insert the board. After inserting the board, push down the eject levers in the direction of the arrow and connect certainly to the connectors on the MB-385 board.

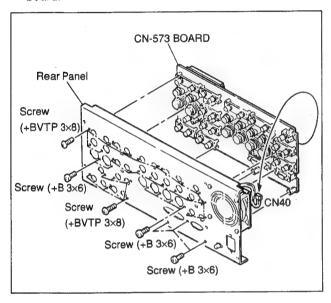


#### 1-4-2. Board Replacement

#### <PROCESS UNIT>

#### CN-573 Board:

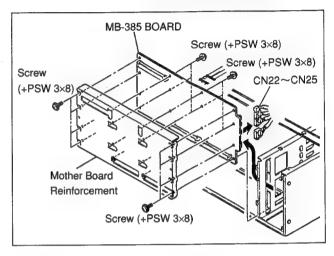
- ① Remove the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Rear Panel.)
- 2 Remove connector CN40 from the CN-573 board.
- 3 Remove thirty-seven screws (+BVTP  $3 \times 8$ : twenty-eight screws/+B  $3 \times 6$ : nine screws), and remove the CN-573 board.



(4) Replace a new one in the reverse procedure of steps (1) through (3).

#### MB-385 Board:

- 1 Remove all the Plug-in Boards.
- ② Remove the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Rear Panel.)
- ③ Remove connectors CN22, CN23, CN24 and CN25 on the MB-385 board.
- (4) Remove eight screws (+PSW  $3 \times 8$ ), and remove the Mother Board Ass'y.
- (5) Remove eight screws (+PSW  $3 \times 8$ ), and remove the MB-385 board from the Mother Board Reinforcement.

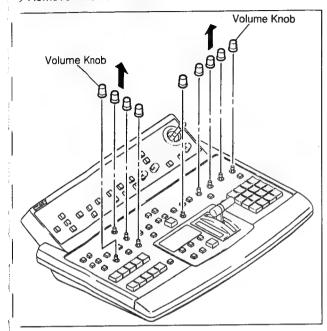


- (6) Install the Mother board Reinforcement to a new MB-385 board by eight screws (+PSW 3 × 8).
- 7 Thread eight screws (+PSW  $3 \times 8$ ) to the Mother board Ass'y snugly but do not tighten.
- (8) Insert the DA-63 board into the No.1 slot and the AD-76 board into the No.7 slot and connect the connectors on the DA-63 and AD-76 boards to connectors on the MB-385 Borad.
- (9) Tighten the eight screws which is threaded snugly in step (7).

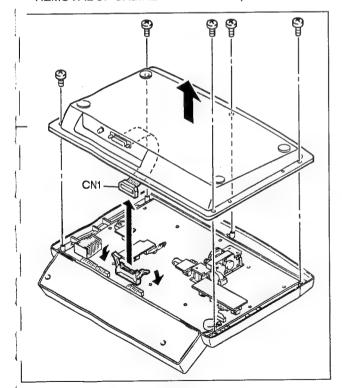


### **CONTROL PANEL> KY-223 Board:**

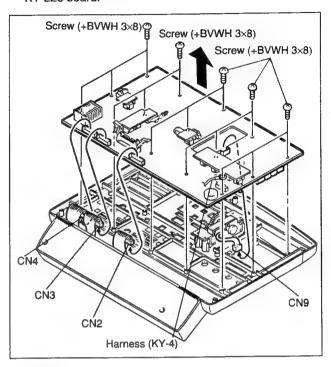
Remove nine volume knobs.



Remove the lower panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel.)



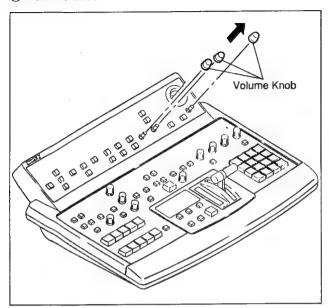
- 3 Remove connectors CN2, CN3, CN4 and CN9 on the KY-223 board. Remove one screw (+BVWH 3  $\times$  8) and remove the Harness (KY-4).
- (4) Remove fourteen screws (+BVWH  $3 \times 8$ ) and remove the KY-223 board.



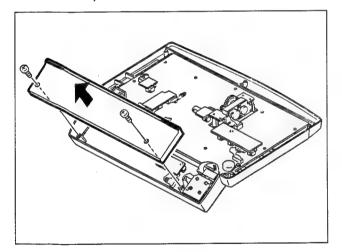
(5) Replace a new one in the reverse procedure of steps (1) through (4).

#### KY-225 Board:

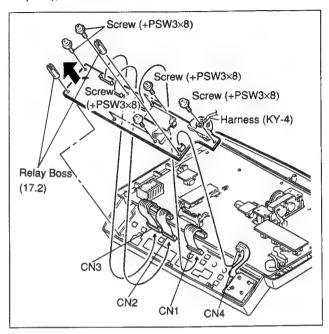
1) Remove three volume knobs.



② Remove the lower panel and the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel and Rear Panel.)



- 3 Remove connectors CN1, CN2, CN3 and CN4 from the KY-225 board, and remove one screw (+B 3  $\times$  6) and remove the Harness (KY-4).
- 4 Remove six screws (+PSW  $3 \times 8$ ) and two relay bosses (17.2), remove a new one.



(5) Replace a new one in the reverse procedure of steps (1) through (4).



## 1-5. REPLACEMENT OF SWITCHING REGULATOR

#### -5-1. Primary Circuit and Electric Shock

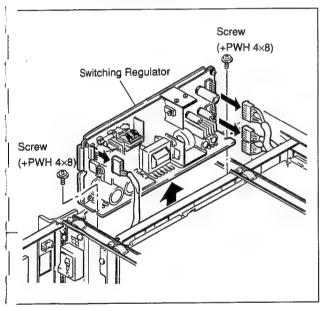
The most of the switching regulator is primary side circuit. ake care of an electric shock when removing the switching gulator for replacement or another reason.

#### 1-5-2. Switching Regulator of Removal

**OTE:** When replacement of the switching regulator, be sure to turn the power OFF and start work.

#### REPLACEMENT PROCEDURE>

- Remove the top panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Top Panel)
- Pemove three connectors and Harness.
  - ) Remove the Harness (AC Inlet) from the wire clamp.
- .) Remove two screws (+PWH 4 × 8).
- (5) Pull up the switching regulator.



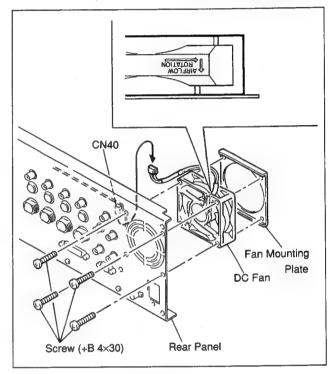
(6) Replace a new one in the reverse procedure of steps (1) through (5).

#### 1-6. REPLACEMENT OF DC FAN MOTOR

**NOTE:** If the unit serves for about ten thousand times, the DC fan motor should be replaced.

#### <REPLACEMENT PROCEDURE>

- ① Remove the rear panel Ass'y. (Refer to "Section 1-1 REMOVAL OF CABINET" Rear Panel.)
- 2 Remove connector CN40 on the CN-573 board. Remove four screws (+B 4  $\times$  30) and remove the DC fan motor.

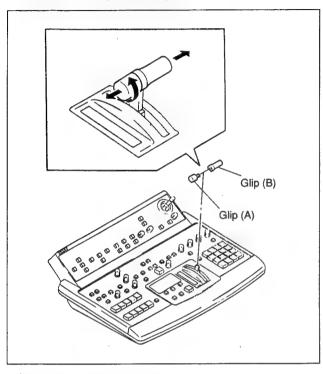


③ Install a new one in the direction of the arrow in the figure in the revers of steps ① through ②.

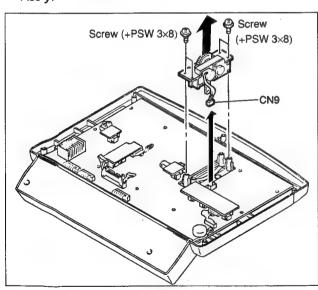
## 1-7. REPLACEMENT OF MAIN PARTS ON CONTROL PANEL

#### <FADER ASS'Y>

1) Remove the Grip A and Grip B.



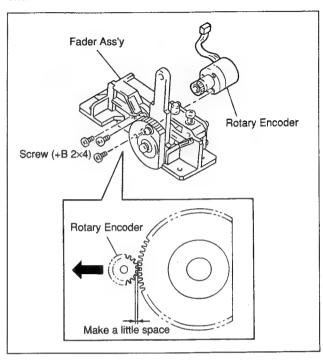
- 2 Remove the lower panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel.)
- ③ Remove connector CN9 on the KY-223 board. Remove four screws (+PSW 3 × 8) and remove the Fader Ass'y.



4 Replace a new one in the reverse of steps 1 through 2.

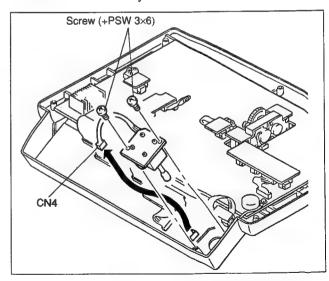
#### <POSITION ADJUTMENT of ROTARY ENCODER>

When replaceing a Rotary Encoder, adjust the lever for moving smoothly. Tighten three screws (+B 2  $\times$  4) of a new one.



#### <JOY STICK>

- 1) Remove the lower panel and the rear panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Lower Panel and Rear Panel.)
- ② Remove connector CN4 on the KY-225 board. Remove two screws (+PSW 3 × 6) and remove the KY-226 board with Joy Stick.



3 Replace a new one in the reverse of steps 1 through 2.



#### 1-8. RACK-MOUNTING

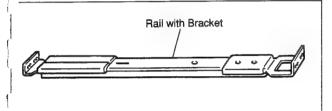
his unit can be mouted on an EIA Standard 19-inch rack. /hen mounting, be sure to use a support angle or slide rail.

Recommended slide rail
 RMM-30 (SONY RACK MOUNT RAIL)

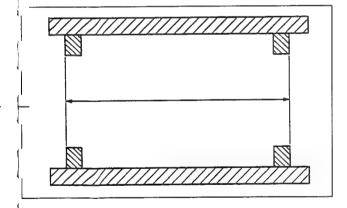
#### 1-8-1. When Using RMM-30 (optional accessary)

ne unit can be mounted easily on the 19-inch standard rack y using one RMM-30(SONY Rack Mount Rail) for one unit.

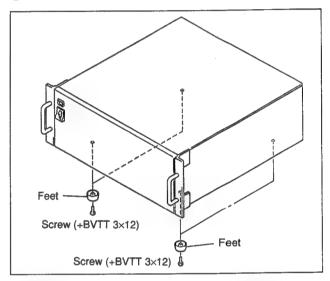
Component parts
Rail with bracket ×2
Screw (+PWH×10) ×2
Plate nut M4 ×2
Screw (+B 5×8) ×8



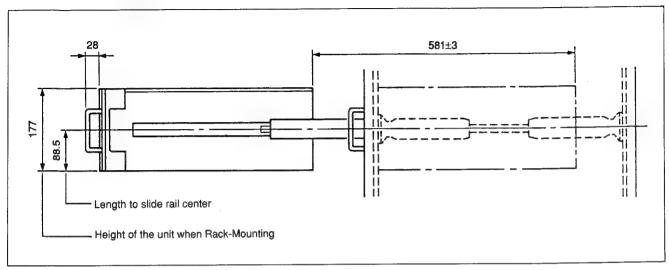
Usable rack
 One with a depth of 660 to 830 mm



- How to install
- 1) Remove four feet from the bottom of the unit.

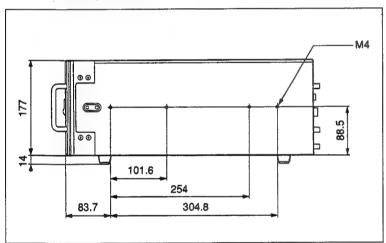


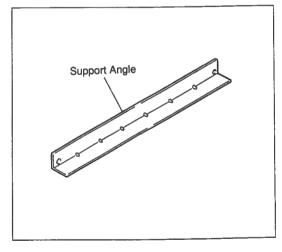
② Install the rack mounting rail. For details, refer to INSTALLATION MANUAL packed with the rack mounting rail RMM-30. Maximum movable length of the DFS-500 is as follows.



#### 1-8-2. In Cases When Other Than RMM-30 is Used:

In cases when a support angle or a slide rail that is sold by rack makers is used, check the external dimensions of the unit and the slide rail mounting holes and mount it according to the instruction manual of each rack maker.



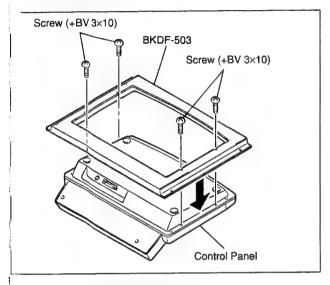




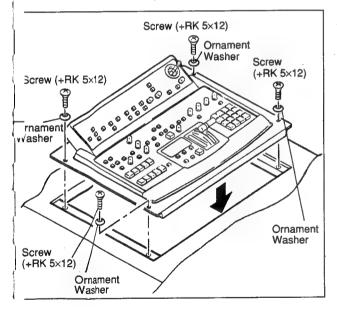
#### 1-8-3. BKDF-503 Installation

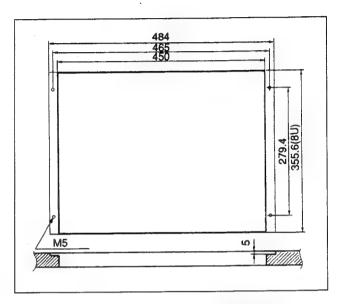
Install the BKDF-503, RACK MOUNT PANEL to the lower panel of the control panel.

Tighten the supplied accessary four screws (+BV  $3 \times 10$ ) to the BKDF-503.



) Fit the BKDF-503 into the adjustment desk. Tighten the supplied accessary four screws (+RK  $5 \times 12$ ) and ornament washers (DIA.5) to the BKDF-503.





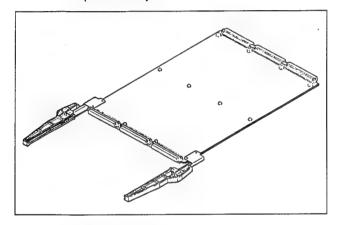
Dimension of installation hole on the adjustment desk

## 1-9. FIXTURES / MESURING INSTRUMENTS

#### 1-9-1. Fixtures

#### **Extension Board EX-326**

Sony Part No. J-6186-940-A Extension Board EX-326 is used for AD-76, DA-63, FM-29, MY-54, PU-78, SY-172 and VE-25 (BKDF-501/501P) Boards to inspect and adjust.



#### PLCC IC Extraction Tool

Sony Part No. J-6035-070-A

This tool is used for extracion the PLCC ICs,. (Refer to "Section 1-14-3 Replacement of PLCC IC".)

#### 25-pin Control Cable (5m)

Sony Part No. 1-575-065-11

This 25-Pin Control Cable is used for inspection and adjustment.

#### **Connector Cable**

Multi Connector Cable (DOBNC) Sony Part No. J-6031-830-A Multi Connector Cable (DIBNC) Sony Part No. J-6031-820-A

#### Video Cable (S-BNC)

Sony Parts No. J-6381-380-A

#### Standerd product

Spot Heater HS-600 (100 V)

HS-600 (117 V) HS-600 (220 V) HS-600 (240 V)

Nozzle

HS-616 (for HS-600) HS-619 (for HS-600)

These Spot Heater and Nozzle are used for extraction the ICs by warm wind after connecting the Spot Heater and the

For the above spot Heater and the Nozzie, please contact to the following.

Ikas.Inc

ADDRESS: Executive Center Suite 312, 21601 Devonshire

St., Chatsworth, CA. 91311, USA

TEL: 818-882-4116 FAX: 818-341-6466

#### Bielec:

ADDRESS: Valencia, 40, 08015 Barcelona, Spain

TEL: 34 3 226 44 87 FAX: 34 3 226 69 32

#### Scope Laboratories:

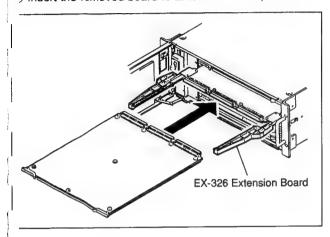
3 Walton Street, Airport West, Melbourne, Australia

TEL: (03) 338 1566 FAX: (03) 338 5675



#### 1-9-2. Use of Extension Board

- Turn the power OFF. Open the front panel. Pull up the eject levers on the board and remove the board.
- Insert the Extension Board, EX-326 to the slot of the removed board in step ①.
- ) Insert the removed board to Extension Board, EX-326.



#### 1-9-3. Mesuring Instruments

- Comosite Signal Generator
   Equivalent: TEK1410/textronix
- 2. Y/C signal Generartor Equivalent: TSG130/textronix
- Component Signal Generator Equivalent: TSG300/textronix
- Waveform Monitor & Vectorscope (Composite)
   Equivalent: TEK1780R/textronix
- 5. Video Monitor Equivalent: PVM144Q/Sony
- 6. Oscilloscope Equivalent: 2445/textronix
- 7. Digital voltage meter Equivalent: 3435A/Hewlett Packard
- 8. Frequency counter Equivalent: 5315/Hewlett Packard

# 1-10. CONNECT OF SUPPLIED POWER CORD

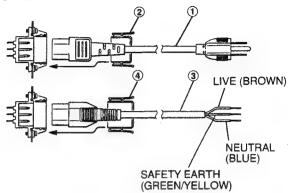
(UC)Requied, Parts

1 Power Cord 1-551-812-11 2 Plug Holder(Black) 2-990-242-01

(EK)Requied, Parts

③ Power Cord 1-590-910-11

4 Plug Holder(Gray) 3-170-078-01



# 1-11. MATCHING CONNECTOR/CABLE

When connecting cable to the connectors on the connector panel, match those connectors or equivalent with each other as listed below.

DFS-500 side connector			Matching Connector or Cable	
Connector F	Connector Function Name Using Connector		Connector	Sony Parts No.
PGM OUT	COMPOSITE 1, 2 Y/C 1, 2 COMPONENT 1, 2	BNC S-VIDEO, Plug(F) Plug, 12(F)	BNC S-VIDEO, Plug(M) Plug, 12(M)	1-560-069-11 YC-30 V(3 m) 1-562-995-00
KEY OUT		BNC	BNC	1-560-069-11
BLACK BURST OUT	1, 2, 3, 4	BNC	BNC	1-560-069-11
DSK KEY IN	1, 2	BNC	BNC	1-560-069-11
DSK VIDEO IN	COMPOSITE/G/Y 1, 2 R/R-Y B/B-Y	BNC BNC BNC	BNC BNC BNC	1-560-069-11 1-560-069-11 1-560-069-11
VIDEO INPUTS	COMPOSITE 1, 2, 3, 4 Y/C 1, 2, 3, 4 COMPONENT 1, 2, 3, 4	BNC S-VIDEO, Plug(F) Plug, 12(M)	BNC S-VIDEO, Plug(M) Plug, 12(F)	1-560-069-11 YC-30 V(3 m) 1-562-159-00
EXT KEY IN		BNC	BNC	1-560-069-11
GEN LOCK IN	1, 2	BNC	BNC	1-560-069-11
T1/CUE		BNC	BNC	1-560-069-11
T2		BNC	BNC	1-560-069-11
CONTROL PANEL		D-SUB, Plug 25P(F)	D-SUB, Plug 25P(M)	(*)
EDITOR		D-SUB, Plug 9P(F)	D-SUB, Plug 9P(M)	1-560-651-00

<sup>(\*)</sup>This connector is attached to the cable of 10 m (1-696-660-11).



# 1-12. INPUT/OUTPUT SIGNALS OF CONNECTOR

PGM(Program)OUT COMPOSITE 1, 2

CONNECTOR: BNC

utput voltage: 1.0Vp-p (VBS), (Sync/burst: UC: 0.286Vp-p PAL: 0.3Vp-p)

utput impedance:  $75\Omega$ 

PGM(Program)OUT Y/C 1, 2

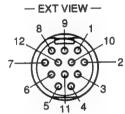
ONNECTOR: S(Separates) terminal 4pin Connector (Female)

- EXT VIEW -

Pin No	Signal Name	Function	Specification
1	Y GND	Ground of Luminance Output	Y terminal Output voltage: 1.0Vp-p (VS) (Y Video: 0.714Vp-p,Sync: 0.286Vp-p)NTSC
2	C GND	Ground of Chrominance Output	(Y Video: 0.7Vp-p,Sync: 0.3Vp-p)PAL Output impedance: 75Ω C terminal Output voltage: 0.681Vp-pNTSC
3	Y	Luminance Output	0.64Vp-pPAL (100/0/75/0 Color Bars) (Burst: 0.286Vp-p)NTSC
4	С	Chrominance Output	(Burst: 0.3Vp-p)PAL Output impedance: 75Ω

PGM(Program)OUT COMPONENT 1,2

ONNECTOR: Component Video Out 12pin Connector(Female)



Pin No	Signal Name	Function	Specification
1	Y OUT	Luminance Output	Output voltage: 1.0Vp-p (VS) (Y Video: 0.714Vp-p, Sync: 0.286Vp-p)NTSC
2	GND	Luminance Output Common	(Y Video: 0.7Vp-p, Sync: 0.3Vp-p)PAL Output impedance: 75Ω
3	R-Y	Chrominance R-Y Output	Output voltage: 0.755Vp.p.
4	GND	R-Y Output Common	Output voltage: 0.756Vp-p (100/0/75/0 Color Bars)NTSC 0.525Vp-p
5	B-Y	Chrominance B-Y Output	(100/0/75/0 Color Bars)PAL. Output impedance: 75Ω
6	GND	B-Y Output Common	
7 thru 12			

FS-500/500P

**KEY OUT** 

CONNECTOR: BNC

Output voltage: 1.0Vp-p (Sync signal is nothing.)

Output impedance:  $75\Omega$ 

BLACK BURST OUT 1,2,3,4

CONNECTOR: BNC

Output voltage: Sync: 0.286Vp-p Burst: 0.286Vp-p.....NTSC

Sync: 0.3Vp-p Burst: 0.3Vp-p.....PAL

Output impedance:  $75\Omega$ 

DSK(Down Stream Keyer)KEY IN 1, 2

Through Out

(This connector is function to install the optional board, BKDF-502/502P.)

CONNECTOR:BNC

Input voltage: 0.7 through 1.0Vp-p (Sync signal is nothing)

or 1.0Vp-p (Sync: about 0.3Vp-p)

Input impedance: High impedance or  $75\Omega$  (with terminate a  $75\Omega$  ON/OFF switch)

DSK(Down Stream Keyer)VIDEO IN

(This connector is function to the optional board, BKDF-502/502P.)

CONNECTOR: BNC

① When the S102 DSK VIDEO SELECT of DA-63 board is "COMPOSITE" position.

Connector	Function	Specification
COMPOSITE/G/Y	Composite Input (Through out)	Input voltage: 1.0Vp-p (VBS), (Sync/Burst: 0.286Vp-p)NTSC (Sync/Burst: 0.3Vp-p)PAL Input Impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)
R/R-Y		
B/B-Y		



# When the S102 DSK VIDEO SELECT of the DA-63 board is "Y/R-Y/B-Y" position.

Connector	Function	Specification
COMPOSITE/G/Y	Y: Luminance Input	Input voltage: 1.0Vp-p (VS), (Sync: 0.286Vp-p)NTSC (Sync: 0.3Vp-p)PAL Input Impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)
R/R-Y	Color differential signal R-Y: Chrominance Input	Input voltage: 0.756Vp-p (100/0/75/0 Color Bars)NTSC
B/B-Y	Color differential signal B-Y: Chrominance Input	0.525Vp-p (100/0/75/0 Color Bars)PAL Input impedance: 75Ω

# $\ensuremath{\mathfrak{J}}$ When the S102 DSK VIDEO SELECTof the DA-63 board is "R/G/B" position.

Connector	Function	Specification
COMPOSITE/G/Y	G: RGB Signal G Input (with Sync)	Input voltage: 1.0Vp-p (G signal: 0.7Vp-p + Sync: 0.3Vp-p) Input impedance: High impedance or 75Ω (with terminated 75Ω ON/OFF switch)
R/R-Y	R: RGB Signal R Input	
B/B-Y	B: RGB Signal B Input	Input voltage: 0.7Vp-p Input impedance: 75Ω

# VIDEO INPUTS COMPOSITE 1,2,3,4

CONNECTOR:BNC

Input voltage: 1.0Vp-p (VBS)

(Sync/Burst: 0.286Vp-p).....NTSC (Sync/Burst: 0.3Vp-p).....PAL

Input impedance: 75Ω

VIDEO INPUTS Y/C 1, 2, 3, 4

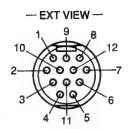
CONNECTOR:S(Separates) terminal 4pin Connector (Female)



Pin No	Signal Name	Function	Specification
1	Y GND	Ground of Luminance Input	Y terminal input voltage: 1.0Vp-p (VS) (Y Video: 0.714Vp-p, Sync: 0.286Vp-p)NTSC (Y Video: 0.7Vp-p, Sync: 0.3Vp-p)PAL
2	C GND	Ground of Chrominance Input	Input impedance: 75Ω C terminal input voltage: 0.681Vp-p (100/0/75/0 Color Bars)
3	Y	Luminance Input	(Burst: 0.286Vp-p)NTSC (Burst: 0.3Vp-p)PAL Input impedance: 75Ω
4	С	Chrominance Input	

VIDEO INPUTS COMPONENT 1, 2, 3, 4

CONNECTOR: Component Video In 12pin Connector(Male)



Pin No	Signal Name	Function	Specification
1	CPN Y	Luminance Input	Input voltage: 1.0 Vp-p (Y Video: 0.714Vp-p, Sync: 0.286Vp-p)NTSC
2	GND	Luminance Input Common	(Y Video: 0.7Vp-p, Sync: 0.3 Vp-p)PAL Input impedance: 75Ω
3	CPN V	Chrominance R-Y Input	
4	GND	R-Y Input Common	Input voltage: 0.756Vp-p (100/0/75/0 Color Bars)NTSC
5	CPN U	Chrominance B-Y Input	0.525Vp-p (100/0/75/0 Color Bars)PAL Input impedance: 75Ω
6	GND	B-Y Input Common	
7 thru 9			
10	GND	Ground	
11 thru 12			

EXT KEY IN

CONNECTOR: BNC

Input voltage: 0.7 through 1.0Vp-p (The voltage of Sync is nothing)

or 1.0Vp-p (Sync: about 0.3Vp-p)

Input impedance:  $75\Omega$ 

GEN LOCK IN 1, 2 + Through Out

CONNECTOR: BNC

Input voltage: 0.43Vp-p (BB), (Sync/Burst: 0.286Vp-p) ...NTSC

(Sync: 0.3Vp-p Burst: 0.3Vp-p) ...PAL

Input impedance: High impedance or  $75\Omega$  (with terminated  $75\Omega$  ON/OFF switch)

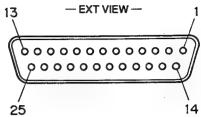
T1/CUE, T2

CONNECTOR: BNC Input voltage: TTL level Input impedance:  $75\Omega$ 



CONTROL PANEL(PROCESS UNIT SIDE)

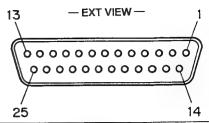
ONNECTOR: D-SUB 25P(Female)



			20 14
Pin No	Signal name	Function	Specification
1	GND	Frame Ground	Definition of A and B
2	DC CON	12V Output	
3	KRD+	Receive Data "B"	
4	GND	Receive Common	
5	KTD+	Transmit Data "B"	
6	GND	Transmit common	
7	RVD+	Transmit VD "B"	
8 thru 11	NOT USED		
12	GND	Ground	
13	GND	Ground	
14	DC CON	12V Output	G " A" + R
15	DC CON	12V Output	
16	KRD-	Receive Data "A"	- <i>m</i>
17	GND	Receive Common	A < B → "1" (MARK) A > B → "0" (SPACE)
18	KTD-	Transmit Data "A"	
19	GND	Transmit Common	
20	RVD-	Transmit VD "A"	
21 thru 24	NOT USED		
25	GND	Frame Ground	

# CONTROL PANEL (CONTROL PANEL SIDE)

CONNECTOR: D-SUB 25P(Female)

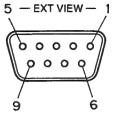


Pin No	Signal name	Function	Specification
1	FG	Frame Ground	Definition of A and B
2	+12 V	12 V Input	
3	MiT+	Transmit Data "B"	
4	GND	Transmit common	
5	RCV+	Receive Data "B"	
6	GND	Receive Common	•
7	RVD+	Receive VD "B"	
8	NOT USED		G " A" + R
9	+12 V PS	ICP PASS 12 V INPUT	1 Y
10	+12 V PS	ICP PASS 12 V INPUT	<i>''''</i>
11	NOT USED		A < B → "1" (MARK) A > B → "0" (SPACE)
12	GND	Ground	·
13	GND	Ground	·
14	+12 V	12 V Input	
15	+12 V	12 V Input	
16	MIT-	Transmit Data "A"	
17	GND	Transmit Common	
18	RCV-	Receive Data "A"	
19	GND	Receive Common	
20	RVD-	Receive VD "A"	
21 thru 24	NOT USED		
25	FG	Frame Ground	



# EDITOR CONNECTOR

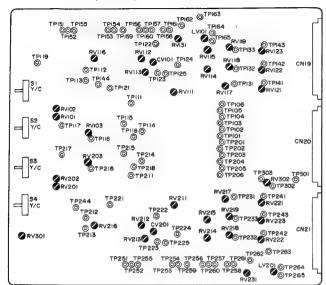
ONNECTOR: D-SUB 9P(Female)



Pin No	Signal name	Function	Specification
1	GND	Frame Ground	Definition of A and B
2	XMIT-	Transmit "A"	
3	RCV+	Receive "B"	
4	GND	Receive Common	"в" +
5	NOT USED		G " A" R
6	GND	Transmit Common	<i>m</i>
7	XMIT+	Transmit "B"	A < B → "1" (MARK)
8	RCV-	Receive "A"	A > B → "0" (SPACE)
9	GND	Frame Ground	

# 1-13. EXPLAIN OF SWITCH/INDICATOR/ VOLUME

# AD-76 BOARD (A side)



Volume

CV101(C7): A COLOR F LOCK trimmer capacitor

Adjust the A-CH chroma decoder color lock.

CV201(L7): B COLOR F LOCK trimmer capasitor

Adjust the B-CH chroma decoder color lock.

LV101(B10): A VFO BIAS coil

Adjust the A-CH VFO control voltage

centering.

LV201(N13): A VFO BIAS coil

Adjust the B-CH VFO control voltage

centering.

RV101(E2): A CPST Y GAIN control

Adjust the A-CH Y gain of the composite input.

RV102(E2): A CPST C GAIN control

Adjust the A-CH chroma level of the

composite input.

RV103(F4): A APC LOCK control

Adjust the A-CH burst lock of the digital Y/C

separated clock.

RV111(D8): A SEP Y GAIN control

Adjust the A-CH S input Y gain.

RV112(C7): A SEP C GAIN control

Adjust the A-CH chroma S input gain.

RV113(C7): A CPST & SEP HUE control

Perform the HUE adjustment of the A-CH

composite signal and the S input signal.

RV114(C10): A CPST & SEP R-Y GAIN control

Adjust the A-CH R-Y gain of composite signal

and the S input signal.

RV115(B10): A CPST & SEP B-Y GAIN control

Adjust the A-CH composite signal and the S

input B-Y gain.

RV116(C4): A INT BURST LEVEL control

Adjust the internal genaration burst level when

the A-CH is no signal.

RV117(D11): A CPNT Y GAIN control

Adjust the A-CH Y gain of component input.

RV118(C11): A CPNT R-Y GAIN control

Adjust the A-CH R-Y gain of component input.

RV119(B11): A CPNT B-Y GAIN control

Adjust the A-CH B-Y gain of the component

input.

RV121(D12): A Y DC control

Adjust the A-CH Y pedestal DC of the A/D

converter.

RV122(C12): A R-Y DC control

Adjust the A-CH R-Y DC of the A/D converter.

RV123(B12): A B-Y DC control

Adjust the A-CH B-Y DC of the A/D converter.

RV131(B9): A W HD PHASE control

Adjust the A-CH H timing of the memory

writing.

RV201(J2): B CPST Y GAIN control

Ajust the B-CH Y gain of the composite input.

RV202(H2): B CPST C GAIN control

Adjust the B-CH chroma level of the

composite input.

RV203(H4): B APC LOCK control

Adjust the B-CH burst lock of the digital Y/C

separater clock.

RV211(K8): B SEP Y GAIN control

Adjust the B-CH Y gain of the S input signal.

RV212(L7): B SEP C GAIN control

Adjust the B-CH chroma gain of the S input

signal.

RV213(L7): B CPST & SEP HUE control

Perform the HUE adjustment of the B-CH

composite signal and the S input signal.

RV214(L10): B CPST & SEP R-Y GAIN control

Adjust the B-CH R-Y gain of the composite

signal and the S input signal.

RV215(K10): B CPST & SEP B-Y GAIN control

Adjust the B-CH B-Y gain of the composite

signal and the S input signal.

RV216(K4): B INT BURST LEVEL control

Adjust the internal genaration burst level when

the B-CH is no input signal.

RV217(J11): B CPNT Y GAIN control

Adjust the B-CH Y gain of the component

input signal.

RV218(L11): B CPNT R-Y GAIN control

Adjust the B-CH R-Y gain of the component

input signal.

RV219(K11): B CPNT B-Y GAIN control

Adjust the B-CH B-Y gain of the component

input signal.

RV221(J12): B Y DC control

Adjust the B-CH Y pedestal DC of the A/D

converter.



DV222(K12): B R-Y DC control

Adjust the B-CH R-Y DC of the A/D converter.

V223(L12): B B-Y DC control

Adjust the B-CH B-Y DC of the A/D converter.

RV231(N12): BW HD PHASE control

Adjust the B-CH H timing of the memory

writing.

V301(L1): EXT KEY CLIP control

Adjust the slice level of the TITLE (EXT KEY)

input signal.

V302(J13): EXT KEY DELAY FINE control

Preform fine adjustment of the TITLE (EXT

KEY) delay vlaue.

witch

51(D1): VIDEO INPUT1 S2(F1): VIDEO INPUT2 3(H1): VIDEO INPUT3

4(K1): VIDEO INPUT4

(Input signal format selection) switch

Select the format of the signal for connecting to the VIDEO INPUTS connectors 1 through 4.

COMPOSITE: composite video signal

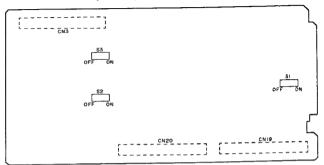
Y/C: Y/C video signal

COMPONENT:component video signal

When the unit is shipped, all of the switches are

set to the COMPOSITE position.

#### CN-573 BOARD (A side)



Switch

S1(E3):  $75\Omega$  terminated switch

This switch is GEN LOCK INPUT 75 $\Omega$  terminated

switch.

When the unit is shipped, this switch is set to the

ON position.

S2(B3): 75Ω terminated switch

This switch is DSK VIDEO INPUT  $75\Omega$  terminated

switch.

When the unit is shipped, this switch is set to the

ON position.

S3(B2): 75Ω terminated switch

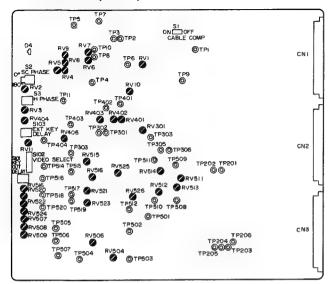
This switch is DSK KEY INPUT  $75\Omega$  terminated

switch.

When the unit is shipped, this switch is set to the

ON position.

#### DA-63 BOARD (A side)



Indicater

D4(B14):

GEN LOCK IN indicater (red)

This indicator shows if the external synchronizing signal (the black burst signal) is input to the GEN LOCK IN connector on the rear panel.

ON (Red light):

GEN LOCK mode lights red when the external synchronizing signal (the black burst signal) is input to GEN LOCK the connecotor on the rear panel.

The synchronizing signal generator of this unit synchronizes to external synchronizing signal

automatically.

OFF (light off):

Lights off when the external synchronizing signal (the black burst signal) is not input to the GEN LOCK IN connector on the rear panel. The synchronizing signal generator of this unit is the

internal oscillator.

Volume

INT SC FREQUENCY control RV1(B8):

Adjust the SC frequency when internal signal oscillation of synchronized signal generator

on this board.

RV2(D14): GEN LOCK SC PHASE FINE control

Perform the fine adjustment of the SC phase

when the external synchronization.

GEN LOCK H PHASE FINE control RV3(E14):

Perform the fine adjutment of the H phase

when external synchronization.

RV4(C12): INT CLAMP PULSE PHASE control

Adjust the phase of the internal generation

clamp pulse. 1-26

INT CLAMP PULSE WIDTH control RV5(C12):

Adjust the width of the internal generation

clamp pulse.

RV6(B11): PGM OUT (COMPOSITE, Y/C, COMPO-

**NENT) BLANKING WIDTH control** 

Adjust the blanking width of PGM OUT

(CÓMPOSITE, Y/C, COMPONENT).

PGM OUT (COMPOSITE, Y/C, COMPO-RV7(B11):

NENT) BLANKING PHASE control

Adjust the blanking phase of PGM OUT

(COMPOSITE, Y/C, COMPONENT).

**BURST WIDTH control** RV8(B12):

Adjust the burst width of PGM OUT

(COMPOSITE, Y/C) and B.B OUT.

**BURST PHASE control** RV9(B12):

**PGM** Adjust the burst phase on OUT(COMPOSITE, Y/C) and B.B OUT.

RV10(D9): INT SC PHASE control

Adjust the SC phase when the internal oscillation of synchronized signal generator

on this board.

RV11(F14): DSK EXT KEY CLIP control

Adjust the clip level of signal for connecting

the DSK KEY IN connector.

When the unit is shipped, this volume is set to

the mechanical center position.

RV301(E8): **ENCODER MODURATION AXIS control** 

Adjust so that the moduration are axes (the R-Y axis and the B-Y axis) are crossed prependicularly by encoding the PGM OUT

(COMPOSITE, Y/C) and B.B OUT.

**B.B OUT BURST BALANCE control** RV401(E9):

Adjust so that the burst level of every B.B OUT

line is same level.(for EK)

B.B OUT SUB CARRIER LEAK BALANCE (B-RV402(E10):

Y) control

Adjust the sub carrier balance of the B.B OUT

encoder B-Y axis.

RV403(E10): B.B OUT SUB CARRIER LEAK BALANCE(R-

Y) control

Adjust the sub carrier balance of the B.B OUT

encoder R-Y axis.(for EK)

RV404(E14): B.B OUT GAIN control

Adjust the gain value of the B.B OUT.

In fact this control is matched by burst level.

RV406(F12): B.B OUT SYNC LEVEL control

Adjust the sync level of the B.B OUT.

PGM OUT(COMPOSITE,Y/C) SYNC LEVEL RV504(L10):

control

Adjust the sync level of the PGM

OUT(COMPOSITE, Y/C).

RV506(L11): PGM OUT(COMPOSITE, Y/C) CHROMA

GAIN control

Adjust the chroma gain value of the PGM OUT

(COMPOSITE, Y/C).

In fact the volume is matched by level of the R-

Y axis.

RV507(K14): PGM OUT(COMPOSITE) GAIN control

Adjust the gain value of the PGM

OUT(COMPOSITE).

In fact the volume is matched by the

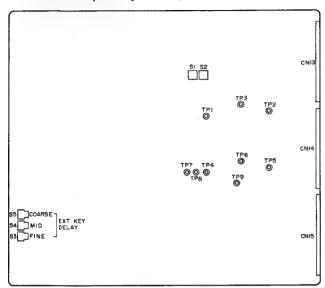
luminance level.

DFS-500/500P



RV526(H9): PGM OUT(COMPOSITE, Y/C) Y/C DELAY nV508(K14): PGM OUT(Y/C)Y GAIN control Adjust the gain value of the PGM OUT (Y/C) control Adjust the delay value of the PGM luminance signal(Y). OUT(COMPOSITE, Y/C) luminance signal (Y) V509(K14): PGM OUT(Y/C)C GAIN control corresponding to the chroma signal(C). Adjust the gain value of the PGM OUT(Y/C) In fact turn this volume the middle of left fully chroma signal(C). and mechanical center. PGM OUT(COMPOSITE, Y/C) SUB CARRIER √511(H7): Switch LEAK BALANCE(R-Y) control CABLE COMPENSATION ON/OFF switch S1(A7): Adjust the sub carrier balance of the PGM This switch is the GAIN lower compensation OUT(COMPOSITE, Y/C) encoder R-Y axis. for the long cable. V512(H8): PGM OUT(COMPOSITE, Y/C) B-Y AXIS ON: The GAIN of the input signal (GEN LOCK **GAIN** control signal) rises about 6dB. Adjust the gain value of the PGM OUT When the unit is shipped, this switch is set to (COMPOSITE,Y/C) encoder B-Y axis. PGM OUT (COMPOSITE, Y/C) BURST the OFF position. V513(H7): GEN LOCK SC PHASE COARSE S2(C14): **BALANCE** control (0° 180°)switch Adjust so that the burst level of every PGM Change the setting reverses the external sync OUT line (COMPOSITE,Y/C) is same level. SC phase by about 180°. PGM OUT(COMPOSITE, Y/C) SUB CARRIER When the unit is shipped, this switch is set to RV514(H8): the "0°" position. LEAK BALANCE(B-Y) control GEN LOCK H PHASE COARSE ADJ. switch S3(D14): Adjust the sub carrier balance of the PGM Perform the tentative adjustment of external OUT (COMPOSITE, Y/C) encoder B-Y axis. sync H phase. RV515(G11): KEY OUT DELAY FINE control The H phase can be changed in sixteen steps Perform the fine adjustment of the delay value with units of about 280ns. of the KEY OUT. in fact turn this volume mechanical center. When the unit is shipped, this switch is set to RV516(H14): KEY OUT GAIN control the 3 position. KEY OUT DELAY COARSE ADJ. switch Adjust the gain value of the KEY OUT. S101(H14): Adjust the delay value of the KEY OUT V518(H11): PGM OUT(COMPONENT) SYNC LEVEL corresponding to the PGM OUT. The delay value can be changed in sixteen Adjust the sync level of the PGM OUT steps with units of about 70ns. (COMPONENT) Y signal. V520(J14): PGM OUT(COMPONENT)Y GAIN control When the unit is shipped, this switch is set to the "5" position. Adjust the gain value of the PGM DSK VIDEO FORMAT SELECT switch OUT(COMPONENT) Y signal. S102(G14): This switch can be changed to match the V521(H11): PGM OUT(COMPONENT)R-Y DELAY conformat of signal which is connected to the DSK VIDEO IN connector. Adjust the delay value of the PGM OUT (COMPONENT) Y signal corresponding to the COMPOSITE: composite video signal Y/R-Y/B-Y: luminance Y signal and color R-Y signal. /522(J14): PGM OUT (COMPONENT)R-Y GAIN control difference signal(R-Y/B-Y) Adjust the gain value of the PGM R/G/B: RGB signal When the unit is shipped, this switch is set to OUT(COMPONENT) R-Y signal. the R/G/B position. /523(J11): PGM OUT(COMPONENT)B-Y DELAY control S103(F14): DSK EXT KEY DELAY ADJ.switch Adjust the delay value of the PGM Adjust the delay value of the DSK KEY IN OUT(COMPONENT) signal corresponding to the DSK VIDEO IN. corresponding to Y signal. The delay value can be changed in sixteen V524(J14): PGM OUT(COMPONENT)B-Y GAIN control steps with units of about 70ns. Adjust the gain value of the PGM When the unit is shipped, this switch is set to OUT(COMPONENT) B-Y signal. the "6" position. V525(H10): PGM OUT(COMPOSITE,Y/C)BURST LEVEL Adjust the burst level of the PGM OUT (COMPOSITE, Y/C).

# FM-29 BOARD (A side)



Switch

S2(J3):

S1(H3): MEMORY LIGHT TIMING (FINE) switch

Adjust the timing of level direction memory

writing of frame synchro memory.

When the unit is shipped, this switch is set to

the following position.

UC:2

EK: 6

As the switch is set to suitable position when the unit is shipped, do not touch the swtich.

MEMORY LIGHT TIMING (COARSE) switch

Adjust the timing of level direction memory

writing of frame synchro memory.

When the unit is shipped, this switch is set to

the following position.

UC:4

EK:4

S3(A10): TITLE EXT KEY DELAY (FINE) switch

Adjust the delay value of the EXT KEY in the

TITLE mode.

When the unit is shipped, this switch is set to

the following position.

UC: D

EK:E

S4(A9): TITLE EXT KEY DELAY (MED) switch

Adjust the delay value of the EXT KEY in the

TITLE mode.

When the unit is shipped, this switch is set to

the following position.

UC:6

EK:5

S5(A9): TITLE EXT KEY DELAY (COARSE) switch

Adjust the delay value of the EXT KEY in the

TITLE mode.

When the unit is shipped, this switch is set to

the following position.

UC : 6

EK:6

#### LE-55 BOARD (A side)



Indicator

D1: POWER indicator (Yellow)

Lights when the Power is turned on.

D2: POWER indicator (Yellow)

Lights when the Power is turned on.

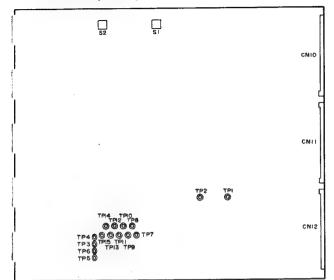
D3: POWER indicator (Yellow)

Lights when the Power is turned on.

D4: POWER indicator (Yellow)

Lights when the Power is turned on.

# PU-78 BOARD (A side)



witch

\_1(E1):

2(C1):

PAGE TURN LIGHTING POSITION switch Adjust the position of the page lighting. When the unit is shipped, the switch is set to the "3" position.

Do not touch the switch for it is set suitable position when the unit is shipped.

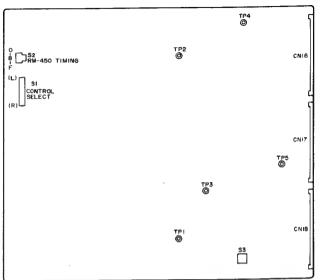
PAGE TURN LIGHTING POSITION switch

Adjust the position of the page lighting. When the unit is shipped, the switch is set to

the "9" position.

Do not touch the switch for it is set suitable position when the unit is shipped.

SY-172 BOARD (A side)



Switch

S1(A4): SELECT EDITING CONTORL UNIT switch

Select the editing control unit (BVE-600, RM-450, ONE-GPI, BVE-900 and BVS-3000) When the unit is shipped, the switch is set to

the "BVE-900" posion.

S2(A3): FREEZE TIMING switch

Adjust the freeze point, if DFS-500 with RM-

450.

When the unit is shipped, the switch is set to

the "8" position.

S3-1(L10): FREEZE switch (When changing the cross

point)

ON:2 Frames OFF:0 Frame

When the unit is shipped, the switch is set to

the ON position.

S3-2(L10): SET UP switch

ON:7.5% OFF: 0%

When the unit is shipped, the switch is set to

the OFF position.

S3-3(L10): COLOR-MATTE COMPENSATION switch

ON:Illegal compensation OFF:Limit compensation

When the unit is shipped, the switch is set to

the OFF position.

S3-4(L10): FIELD FREEZE switch

ON:Odd Field OFF:Even Field

When the unit is shipped, the switch is set to

the OFF position.

(NOTE1) If the input signal is asynchronous, S3-1 is set

definitely to ON positon.

(NOTE2) If the editing control unit is BVE-600, S3-4 is set

definitely to OFF positon.

# 1-14. NOTES ON SPARE PARTS

# 1-14-1. Notes on Spare Parts

# (1) Safety Related Cmponents Warning

Components marked with  $\underline{\mathbb{A}}$  on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation.

Replace these components with Sony parts whose part numbers appear in this manual or in service bulletins and service manual supplements published by Sony.

# (2) Standardization of Parts

Spare parts supplied from Sony Parts Center may not always be identical with the parts actually in use due to accommodating the improved parts and/or engineering changes or standardization of genuine parts.

This manual's exploded views and electrical spare parts list indicate the part numbers of the standardized genuine parts at present.

#### (3) Stock of Part

Parts marked with "o" in the SP(Supply code)column of the spare parts list are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional time for delivery.

# (4) Units for Capacitors, Inductors and resistors

The following units may be assumed in schmatic diagrams, electrical parts list and exploded views unless otherwise specified.

Capacitor:  $\mu$  F Inductor :  $\mu$  H Resistor :  $\Omega$ 

# 1-14-2. Replacement of Chip Parts

#### **Required Tools**

Soldering iron: 20W

If possible, use a soldering-iron tip

heatcontroller set to 270 ± 10°C.

Braided wire : Solder Taul or equivalent

Sony part No. 7-641-300-81

Solder

: 0.6mm dia. is recommended.

Tweezers

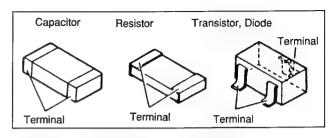
# **Soldering Conditions**

Soldering iron temperature : 270 ± 10°C

Soldering time

: Less than 2 seconds

per pin



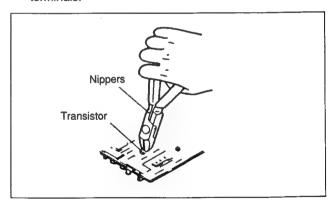
# Replacement of Resistor and Capacitor

- Place the soldering-iron tip onto the chip part and heat it up until the solder is melted. When the solder is melted, slide the chip part aside.
- Make sure that there is no pattern peeling, damage and/ or bridge around the desoldering position.
- After removing the chip part, presolder the area, in which the new chip part is to be placed, with a thin layer of solder.
- Place new chip part in the desired position and solder both ends.

NOTE: Do not use a chip part again once it has been removed.

# Replacement of Transistors and Diodes

- 1. Cut the terminals of the chip part with nippers.
- 2. Remove the cut leads with soldering iron as above.
- Make sure that there is no pattern peeling, damage and/ or bridge around the desoldering positions.
- After removing the chip part, presolder the area, in which the new chip part is to be placed, with a thin layer of solder.
- Place new chip part in the desired position and solder the terminals.





# neplacement of ICs

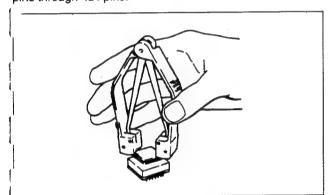
- Using the braided wire, "SOLDER TAUL" (Sony Part No. 7-641-300-81), remove the solder around the pins of the IC-chip to be removed.
- While heating up the pins, remove the pins one by one using sharp-pointed tweezers.
  - Make sure that there is no pattern peeling, damage and/ or bridge around the desoldering position.
- After removing the chip part, presolder the area, in which the new chip part is to be placed, with a thin layer of solder.
- . Place new chip part in the desired position and solder the nins

# -14-3. Removal of PLCC IC

PLCC socket Extracion Tool

ony Part No. J-6035-070-A

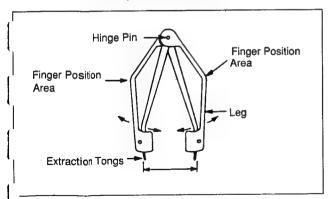
nis extraction tool is useful for extracting the IC (PLCC type) userted into an IC socket, and fits all sizes of ICs from 20 pins through 124 pins.



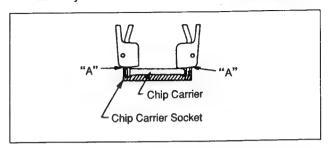
NOTE: Do not try to pull chip carrier out of sccket and let the tool action pull it out. Do not squeeze harder than necessary, only enough that the tool action occurs.

# THou to use the Extracion Tool]

. Spread or compress the tool legs so the tongs will fit into the solts of the chip carrier socket.



Insert the tool tongs into the slots of the carrier socket. Puch fully in so that the tool butts on the socket at "A".

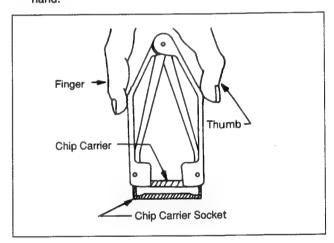


Place the thumb and the first and second finger on the ribbed area of the tool. Maintain a small downward force to keep the tool butted on the socket.

Squeeze the thumb and finger together so that the tool legs tend to straighten.

This action will draw the chip carrier out of the socket and grip it within the tool legs.

Maintain the squeezing action so as to hold the chip in the tool, hold the tool over your other hand and relax the squeeze. The chip will fall out of the tool and into your hand.



# 1-14-4. Replacement of Backup Battery

DFS-500 has a backup battery (Nickel-Cadmium Battery) on the SY-172 board.

This backup battery can register the settings on the control panel (snap shot) and store the effets created by user (user program).

Backup Battery: Nickel-Cadmium Battery

Sony Parts No. 1-528-202-11

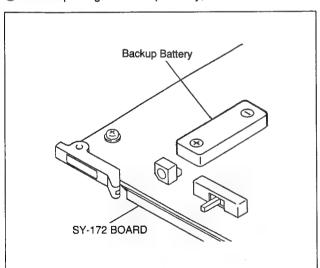
NOTE: This backup battery is charged automatically on normal operation for about eight hour. If it is not used for long time (about more than one month), the backup battery consumes. As a resalt, the following setting (1) through (4) and data is disappeared, and they are initialized. At that time, charge the backup battery.

- (1) Resume function (The setting recovery when turning the power OFF.)
- (2) Data of user program
- (3) Data of snap shot
- (4) Direct pattern assign function

If the unit serves for about five year, the backup battery should be replaced. At this time, the following setting (1) through (4) and data is disappeard, and they are initialized. After replacement, charge the backup battery.

# Replacement Procedure

- ① Remove eight screws (+PTTWH  $3 \times 6$ ), and remove the shield plate.
- ② Unsolder two soldering parts, and replace the backup battery.
- 3 After replacing the backup battery, and solder it.



# 1-14-5. Replacement of Fuse

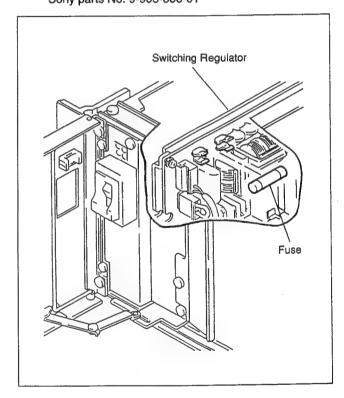
The fuse is mounted on the switching regurator. This fuse melted when the too much electric current flows by unusual instrument.

Before replacing the fuse, check the trouble of fuse.

# **Replacement Procedure**

Before replacement of Fuse, take out the cause of short for unit.

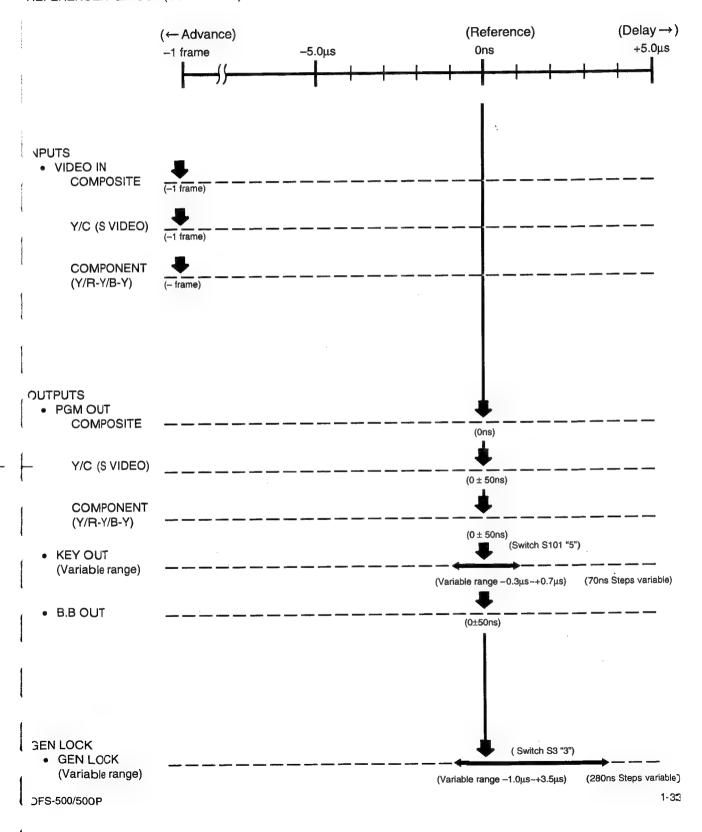
- ① Remove the top panel. (Refer to "Section 1-1 REMOVAL OF CABINET" Top Panel.)
- ② Remove the fuse on the switching regurator from the holder.
- ③ Replace a new fuse. Fuse: (for UC) GGL10 250V10A Sony parts No. 9-903-804-01 Fuse: (for EK) S506-6.3A COLOR Sony parts No. 9-903-806-01



# 1-15. TIMING CHART

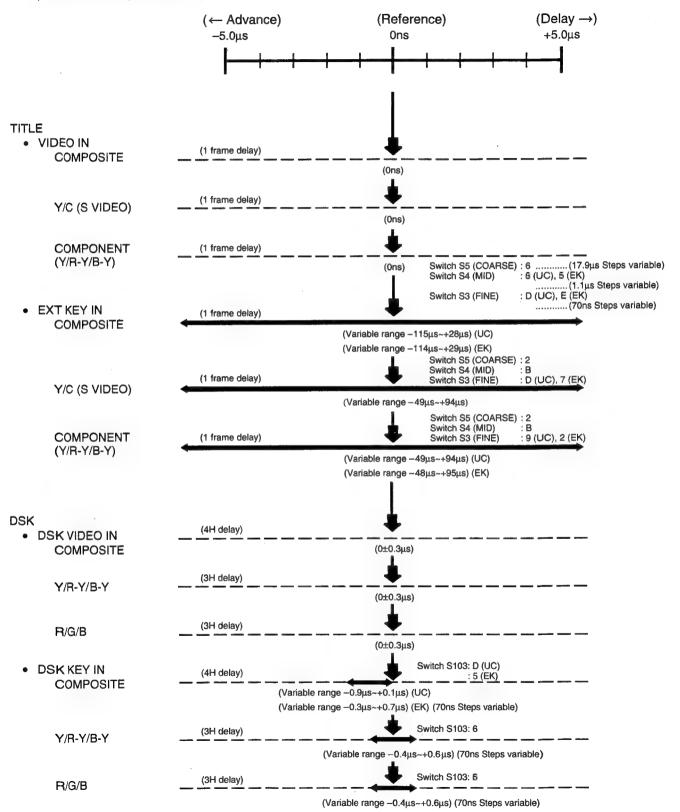
# -15-1. System Timing

REFERENCE: PGM OUT (COMPOSITE)



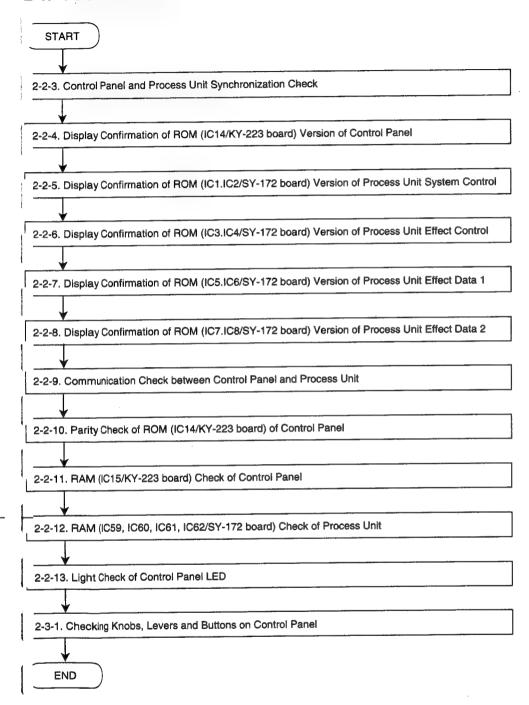
# 1-15-2. Timing of TITLE and DSK (Video Phase)

Test point: PGM OUT (COMPOSITE)



# SECTION 2 DIAGNOSTIC

# ∠-1. FLOW CHART

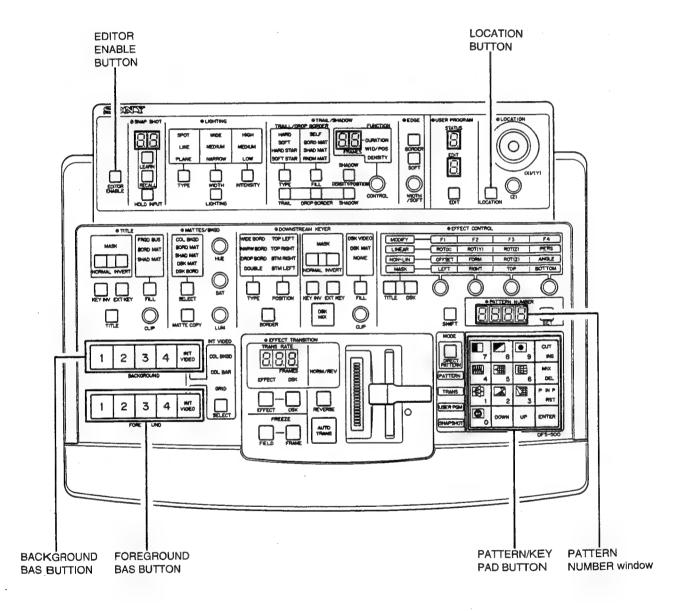




# 2-2. CHECK MODE

If any error occurs at power on or during normal operation, the error number is displayed in the PATTERN NUMBER window.

Buttons and displays that are referred in the following check procedures are labelled as shown below.



# ∠-2-1. Countermeasures for Error Messages

PATTERN NUMBER window	Operation	Cause of error	Countermeasure
Er01	During normal operation	The vertical sync signal is not being sent from main unit to the control panel.  (The control panel works while synchronizing to the vertical sync signal that is supplied from main unit.)	Possible fault in the SY-172 board, the DA-63 board or the cable.
Er02	At power on     During normal operation	Fault in communications between the main unit and the control panel.	Possible fault in the SY-172 board or the cable.
Er10	At power on     During normal operation	Abnormal parity in the control panel ROM (IC14/KY-223 board) of the KY-223 board.	Replace the control panel ROM (IC14) of the KY-223 board.
Er20	At power on     During normal operation	Abnormality in the control panel RAM (IC15/KY-223 board) of the KY-223 board.	Replace the control panel RAM (IC15) of the KY-223 board.
Er40	At power on	Abnormality in the RAMs (IC59,60,61,62) of the main unit (SY-172 board).	Replace the RAMs (IC59,60,61,62) of the main unit (SY-172 board).

OTE: If two or more errors occur at the same time, the sum of the various error numbers is displayed.

# -2-2. Backup Memory Warnings

Backup memory data is checked at power on. If abnormality is found, the memory is initialized automatically. At the same time, the warning and the pattern number are displayed alternatively in the ATTERN NUMBER window. Press the ENTER button of the Key Pad block to clear the warning and sturn to the normal operation condition.

Γ	PATTERN NUMBER window	Meaning
1	bu01	The memory of the user program effect is faulty.  It is initialized automatically.
-	bu02	The snap shot memory is faulty. It is initialized automatically.
	bu04	The memory of the direct pattern assignment is faulty.  It is initialized automatically.
	bu10	The memory to recover (resume function) the default in power OFF is faulty.  It is initialized automatically.

NOTE: If two or more abnormality occur at the same time, the sum of the various warning numbers is displayed.

# 2-2-3. Control Panel and Process Unit Synchronization Check

The control panel works while synchronizing to the vertical sync signal that is supplied from the main unit. The process unit checks all the time during operation that the sync signal is being sent correctly to the control panel.

Confirmation item		
PATTERN NUMBER window		
PATTERN NUMBER SET		
If there is any abnormality, error is displayed.		
ain unit to the control panel correctly.  ing to the vertical sync signal that is supplied from main unit.)		

# 2-2-4. Display Confirmation of ROM (IC14/KY-223 board) Version of Control Panel

ROM (IC14) version of the KY-223 board is displayed. It is confirmed whenever power is turned on.

Execution method during operation	Confirmation item	
While pressing the BACKGROUND 1 and the FOREGROUND 1, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9)      PATTERN/KEY PAD	
	Press the ENTER on the KEY PAD button to restore normal operation.	

# 2-2-5. Display Confirmation of ROM (IC1. IC2/SY-172 board) Version of Process Unit System Control

ROM (IC1. IC2) version of the SY-172 board is displayed.

Execution method during operation	Confirmation item	
While pressing the BACKGROUND 1 and the FOREGROUND 2, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9)      PATTERN/KEY PAD      Repair    Repai	

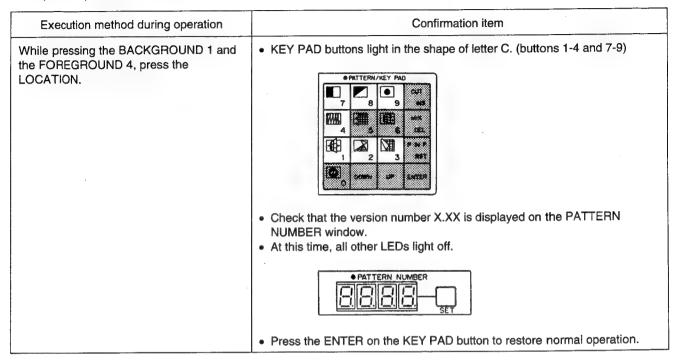
# -2-6. Display Confirmation of ROM (IC3.IC4/SY-172 board) Version of Process Unit Effect Control

ROM (IC3.IC4) version of the SY-172 board is displayed.

Execution method during operation	Confirmation item		
While pressing the BACKGROUND 1 and the FOREGROUND 3, press the LOCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9)      PATTERN/KEY PAD     PATTERN/KEY PAD     SET  Check that the version number X.XX is displayed on the PATTERN NUMBER window.  At this time, all other LEDs light off.  PATTERN NUMBER     SET  Press the ENTER on the KEY PAD button to restore normal operation.		

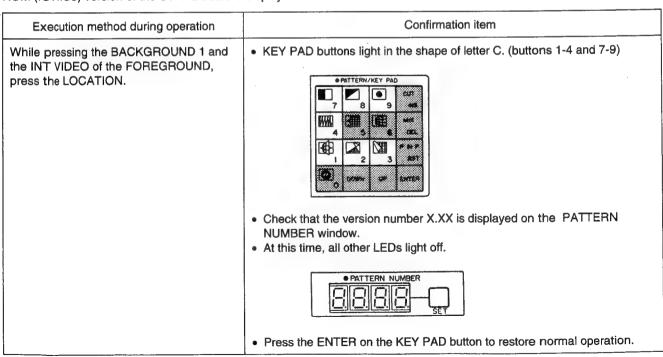
# 2-2-7. Display Confirmation of ROM (IC5.IC6/SY-172 board) Version of Process Unit Effect Data 1

ROM (IC5.IC6) version of the SY-172 board is displayed.



# 2-2-8. Display Confirmation of ROM (IC7.IC8/SY-172 board) Version of Process Unit Effect Data 2

ROM (IC7.IC8) version of the SY-172 board is displayed.



# ∠-2-9. Communication Check between Control Panel and Process Unit

Communication between the control panel and process unit is checked.

- this check, the communication check command is sent from the control panel to the process unit.
- nen, it is checked if a response command is returned within the specified time.

It is checked whenever power is turned on.

Execution method during operation	Confirmation item		
While pressing the BACKGROUND 2 and the FOREGROUND 3, press the OCATION.	KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9)      PATTERN/KEY PAD      Check that the version number STATUS is displayed on the PATTERN NUMBER window.      At this time, all other LEDs light off.  PATTERN NUMBER  PATTERN NUMBER  PATTERN NUMBER  Abnormal		
	Press the ENTER on the KEY PAD button to restore normal operation.		

Communication between the control panel and the process unit is not established correctly.

#### Operator action

• Possible fault in the DA-63 board, the cable, etc.

# 2-2-10. Parity Check of ROM (IC14/KY-223 board) of Control Panel

Parity of KY-223 board ROM (IC14) is checked. It is checked whenever power is turned on.

Confirmation item Execution method during operation KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9) While pressing the BACKGROUND 3 and the FOREGROUND 1, press the LOCATION. Check that the version number STATUS is displayed on the PATTERN NUMBER window. • At this time, all other LEDs light off. → Normal →Abnormal Press the ENTER on KEY PAD button to restore normal operation. Cause Parity of KY-223 board ROM (IC14) is abnormal. Operator action • Replace the KY-223 board ROM (IC14).

# 2-2-11. RAM (IC15/KY-223 board) Check of Control Panel

PAM (IC15) on the KY-223 board is checked. is checked whenever power is turned on.

Execution method during operation	Confirmation item		
While pressing the BACKGROUND 3 and the FOREGROUND 2, press the LOCATION.	• KEY PAD buttons light in the shape of letter C. (buttons 1-4 and 7-9)  PATTERN/KEY PAD  REPROSED TO THE PARTITION OF THE PA		
	Check that the version number STATUS is displayed on the PATTERN NUMBER window.  At this time, all other LEDs light off.		
	● PATTERN NUMBER → Normal		
	PATTERN NUMBER  → Abnormal		
•	Press the ENTER on KEY PAD button to restore normal operation.		
Cause ■ Parity of KY-223 board RAM (IC15) is abr	normal.		
Operator action  Replace the KY-223 board RAM (IC15).			

# 2-2-12. RAM (IC59, IC60, IC61, IC62/SY-172 board) Check of Process Unit

AMs (IC59,IC60,IC61,IC62/SY-172 board) on the process unit is checked. is checked whenever power is turned on.

Execution method during operation	Confirmation item	
	PATTERN NUMBER window	
	PATTERN NUMBER SET	
	If there is any abnormality, error is displayed as shown above.	

#### Cause

• RAMs (IC59,IC60,IC61,IC52/SY-172 board) on the process unit is abnormal.

# Operator action

• Replace the RAMs (IC59, IC60, IC61, IC62) on the process unit SY-172 board.

# 2-2-13. Light Check of Control Panel LED

Light all the LEDs on the control panel one by one sequentially.

# Execution method during operation

While pressing the BACKGROUND 2 and the FOREGROUND 1, press the LOCATION.

NOTE: (1) The LEDs lighting speed can be changed by F4 control on the EFFECT CONTROL block. Normal speed is 100%. The speed ranges from 50% to

200%.

(2) When a button of a block is pressed, lighting jumps to the top of respective block.

# Confirmation item

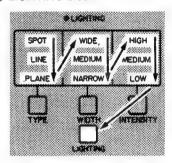
LEDs light in order from top to bottom, left to right.

- 1 EDITOR ENABLE button (EDITOR ENABLE button lights.)
- 2 SNAP SHOT block

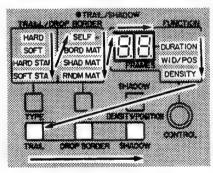


 Counter block test Left hand digit counts up from 0-9, then right hand digit counts up from 0-9.

3 LIGHTING block

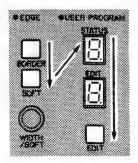


4 TRIAL/SHADOW block



 Counter block test Left hand digit counts up from 0-9, then right hand digit counts up from 0-9.

**5** EDGE block, USER PROGRAM block



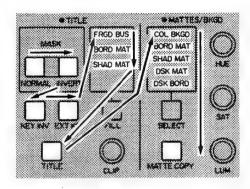
 Counter block test STATUS digit counts up from 0-9, then EDIT digit counts up from 0-9.



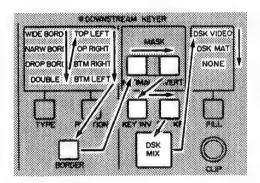
# Execution method during operation

#### Confirmation item

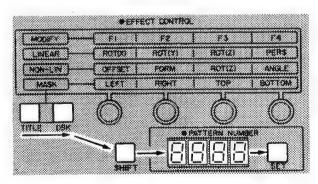
- 6 LOCATION block (LOCATION button lights.)
- 7 TITLE block, MATTES/BKGD block



**8** DOWNSTREAM KEYER block



9 EFFECT CONTROL block, SHIFT button, PATTERN NUMBER block

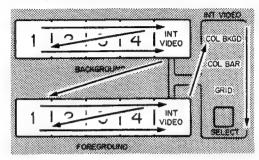


 Counter block test
 Left most digit of the four counters counts up from 0-9, then the next right hand digit counts up from 0-9 in this order.

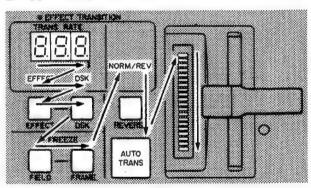
# Execution method during operation

# Confirmation item

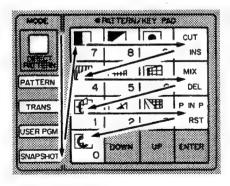
# 10 Primary Crosspoint Bus block



- BACKGROUND button test
   LEDs light from left to right first in red then in orange.
- FOREGROUND button test
   LEDs light from left to right first in red then in orange.
- 11 EFFECT TRANSITION block



- Counter block test
   Left most digit of the three counters counts up from 0-9, then the next right hand digit counts up from 0-9 in this order.
- 12 PATTERN/KEY PAD block



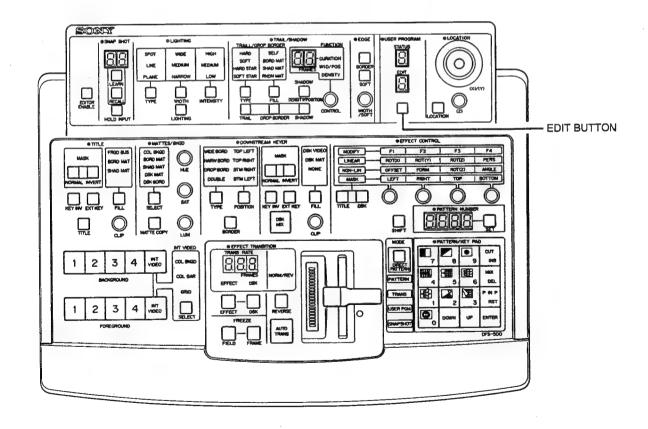
Confirm that the LEDs light in the order as shown above. (buttons 0-9, CUT INS, MIX DEL, P IN P RST and ENTER)

Press the ENTER on the KEY PAD button to restore normal operation.

# 2-3. CHECKING KNOBS, LEVERS AND BUTTONS ON CONTROL PANEL

nobs and corresponding buttons

Knob		Corresponding button	
EFFECT CONTROL block	F1	KEY PAD block	Button 7
	F2	KEY PAD block	Button 8
	F3	KEY PAD block	Button 9
	F4	KEY PAD block	CUT INS
LOCATION block	Z	LOCATION block	LOCATION
		FOREGROUND	INT VIDEO
EDGE block	WIDTH/	EDGE block	Either EDGE block button
	SOFT	FOREGROUND	Button 2
TITLE block	CLIP	TITLE block	Either TITLE block button
		BACKGROUND	Button 4
MATTES/BKGD block	HUE	BACKGROUND	Button 1
	SAT	BACKGROUND	Button 2
	LUM	BACKGROUND	Button 3
DOWNSTREAM KEYER	CLIP	DOWNSTREAM KEYER	Either DOWNSTREAM KEYER block button
TRAIL/SHADOW	CONTROL	TRAIL/SHADOW	Any TRAIL/SHADOWN block button
		FOREGROUND	Button 1



# 2-3-1. Checking Knobs, Levers and Buttons on Control Panel

Execution method during operation Confirmation item

## STEP-1

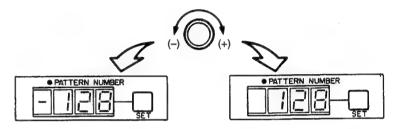
While pressing the BACKGROUND 2 and the FOREGROUND 2, press the LOCATION. (NOTE: At this time, warning tone sounds).

Step 2, 3, 4 and 5 can be checked undividually.

#### STEP-2 Knob Check

Referring to the table showing knobs and corresponding buttons, turn the knob while pressing the corresponding button.

 Turn the knob and read the values shown in the PATTERN NUMBER window.



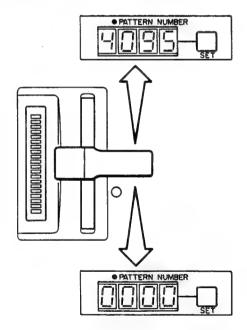
- The values range between -128 (when the knob is fully counterclockwise) and +128 (when the knob is fully clockwise). The values are only displayed while the corresponding button is being pressed.
- Press the ENTER on KEY PAD button to restore normal operation.

# STEP-3 FADER lever Check

Move the FADER lever from an end to the other end.

While pressing any button of EFFECT TRANSITION block, move the FADER lever.

 Move the FADER lever and read the values shown in the PATTERN NUMBER window.



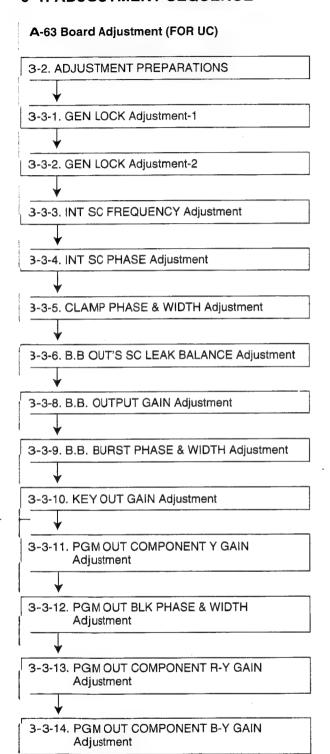
- Values range from 0 (the bottom most end) to 4095 (the top most end)
- Press the ENTER on KEY PAD button to restore normal operation.

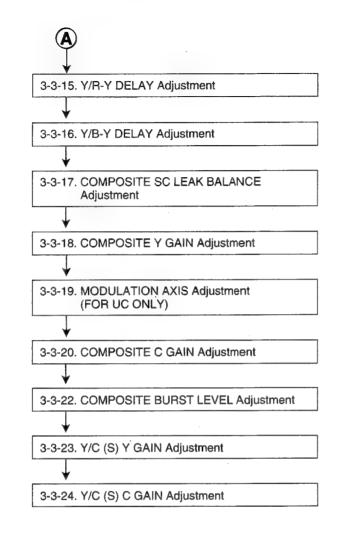


# Confirmation item Execution method during operation Move the LOCATION (X)/&(Y) lever and read the values shown in the STEP-4 LOCATION (X)/(Y) lever Check PATTERN NUMBER window. X (left/right) direction: Move the LOCATION (X)/&(Y) lever. Y (up/down) direction: While pressing EDIT of USER PROGRAM or FOREGROUND 4, move the LOCATION (X)/&(Y) lever. • Moving the lever up or to the right increases the absolute value, moving it down or to the left decreases this value. The range on each axis is 0 to • X (left/right) direction is checked without pressing button. • Y (up/down) direction is checked while the assigned button is pressed. Press the ENTER on KEY PAD button to restore normal operation. Check that the following MODE indicators on the PATTERN/KEY PAD STEP-5 Button Check block light all at the same time. Press all the buttons one by one. · At this time, the buttons of self-illuminating type light their LEDs and the other buttons light their nearest LEDs. TRANS USER PGM In this check, if two or more buttons are pressed at the same time, a warning sounds. If the warning sounds when only one button is pressed, suspect a fault like a short-circuit. Press the ENTER on KEY PAD button to restore normal operation. (NOTE: Check the ENTER on KEY PAD button last.)

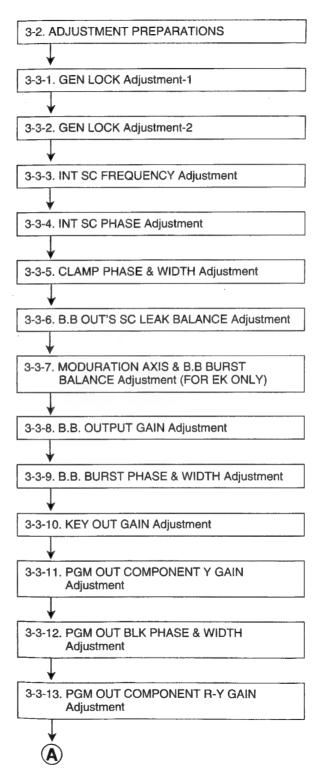
# SECTION 3 ELECTRICAL ALIGNMENT

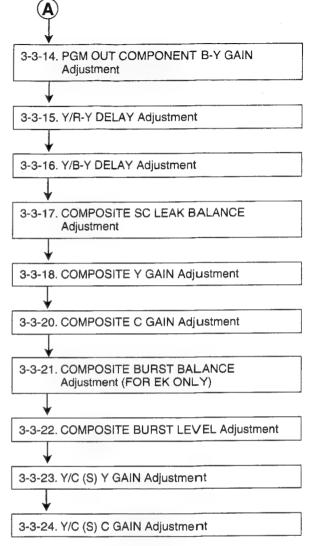
# J-1. ADJUSTMENT SEQUENCE





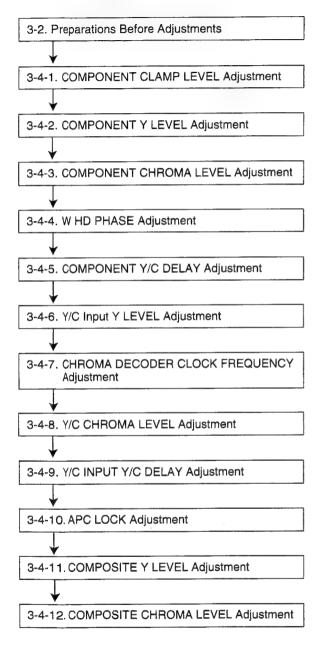
# DA-63 Board Adjustment (FOR EK)





**(A)** 

## AD-76 Board Adjustment



### 3-2. ADJUSTMENT PREPARATIONS

### 3-2-1. Tools/Measuring Equipments

- Composite Signal Generator
   Equivalent: 1410(NTSC)/Tektronix
   1411(PAL)/Tektronix
- Component Signal Generator Equivalent: TSG300/Tektronix
- Y/C Signal Generator
   Equivalent: TSG130(NTSC)/Tektronix
   TSG131(PAL)/Tektronix
- 4. Oscilloscope
  Equivalent: 2445/Tektronix
- Waveform Monitor and Vectorscope
   Equivalent: 1780(NTSC)/Tektronix
   1781(PAL)/Tektronix
- Video MonitorEquivalent: PVM1444Q/Sony
- 7. Frequency Counter
  Equivalent: 5315/Hewlett Packard
- 8. Digital Voltmeter
  Equivalent: 3435A/Hewlett Packard
- 9. Video Cable (S-BNC) Sony Parts No.: J-6381-380-A
- 10. Multi-connector Cable (DIBNC) Sony Part No.: J-6031-820-A
- 11. Multi-connector Cable (DOBNC)
  Sony Part No.: J-6031-830-A
- 12. Extension Board (EX-326) Sony Part No.: J-6186-940-A

### Switch Settings

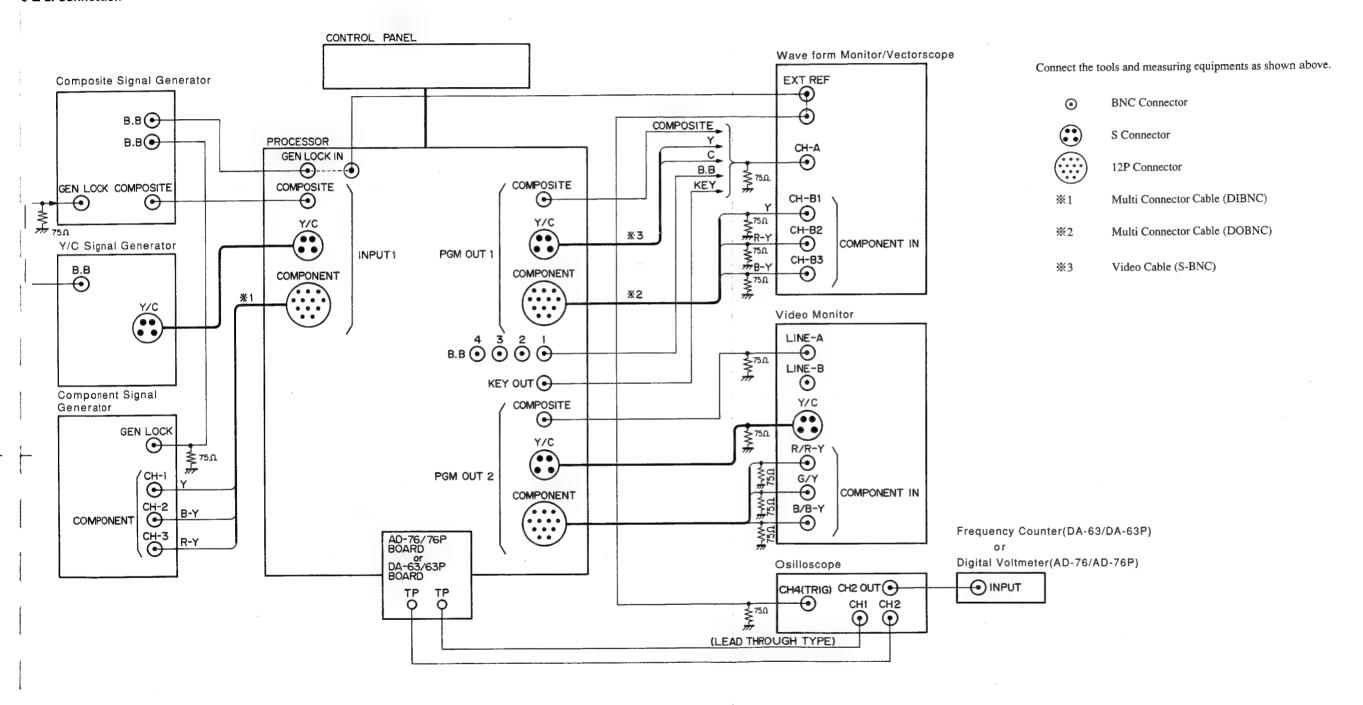
- DA-63 board
- \$1: OFF \$2: 0° \$3: 3 \$101: 5 \$102: R/G/B

S103: 6

### Volume Settings

- DA-63 board
- RV11 : Mechanical center
  RV515: Mechanical center
- RV526: Middle of left fully and Mechanical center

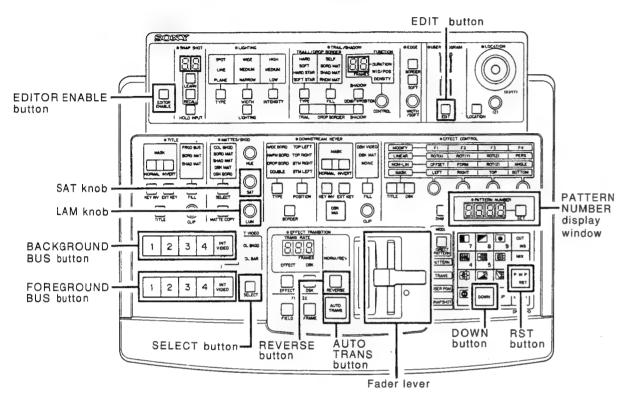
### 3-2-2. Connection



### 3-2-3. Built-in Color Bars

Selecting the built-in color bars

• The buttons, knobs and displays used in this manual are shown in the figure below.



### Selecting the built-in color bars

### STEP-1

Initialize the control panel setting

- 1. If the EDIT button of the USER PROGRAM section is lit, press it to turn it off.
- 2. While pressing the RST and DOWN buttons of the KEY PAD section, press the EDITOR ENABLE button.

The buzzer will sound, and each setting will be initialized-returning them to factory settings.

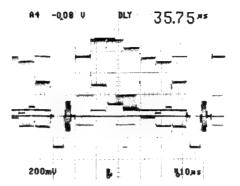
### STEP-2

Output the built-in color bars to PGM OUT

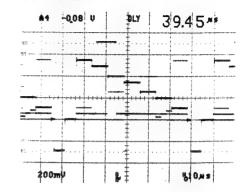
- Select the COL BAR
- 1. Select the INT VIDEO button with both the BACKGROUND bus and FOREGROUND bus.
- 2. Push the FADER LEVER to the top or bottom. The INT VIDEO button of BACKGROUND bus will light up red and that of the FOREGROUND bus will light up orange.
- 3. Press the INT VIDEO SELECT button and select COL BAR.
- Select COL BKGD (100% WHITE)
- 1. Select the INT VIDEO button with both the BACKGROUND bus and FOREGROUND bus.
- 2. Push the FADER LEVER to the top or bottom. The INT VIDEO button of BACKGROUND bus will light up red and that of the FOREGROUND bus will light up orange.
- 3. Press the INT VIDEO SELECT button and select COL BKGD.
- Rotate the SAT knob of the MATTES/BKGD section to the left until the buzzer sounds.
   Do the same for the LUM knob.

### **Built-in Color Bars (FOR UC)**

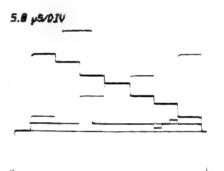
### COMPOSITE



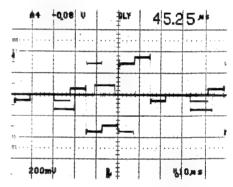
### **COMPONENT Y**



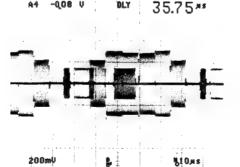
Y/C Y



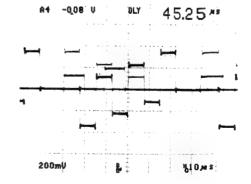
COMPONENT R-Y



Y/C C

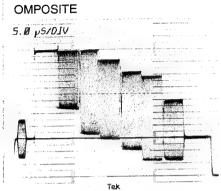


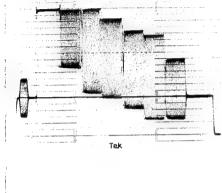
**COMPONENT B-Y** 

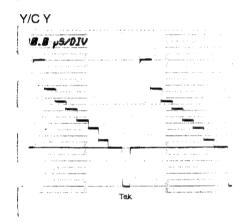


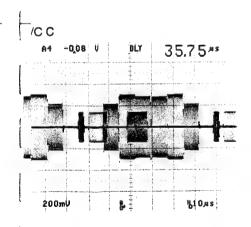
3-4

## built-in Color Bars (FOR EK)

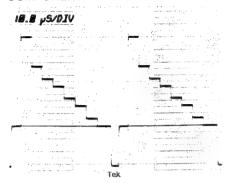




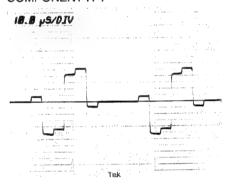




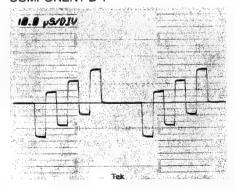
## COMPONENT Y



## COMPONENT R-Y

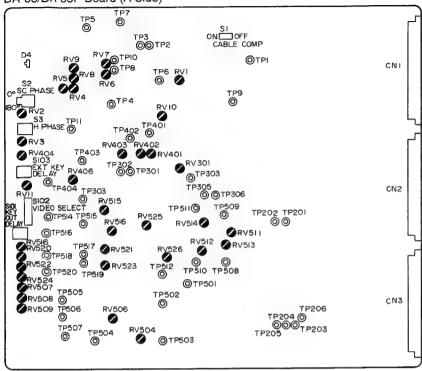


## COMPONENT B-Y

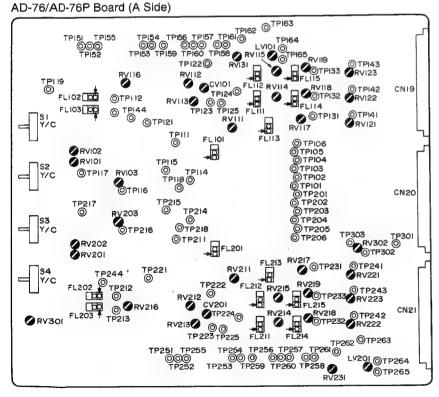


### 3-2-4. Layout of Adjustment Controls

DA-63/DA-63P Board (A Side)







## 3-3. DA-63 BOARD ADJUSTMENT

### 3-3-1. GEN LOCK Adjustment-1

**Adjusting Point** Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection Extension board: Extend the DA-63 board with the EX-326 board. • Switch setting: S3-2/SY-172 (L10) = ON (For UC) S3-2/SY-172 (L10) = OFF (For EK) H PHASE FINE adjustment · Check that D4 lights up. STEP-2 ◆RV3/DA-63 (E14) CH-1: B.B OUT-1 CH-2: GEN LOCK IN H PHASE COARSE S3/DA-63 (D14) NG CH-1 CH-2 OK CH-1

Oscilloscope

CH-1: 200 mV/DIV 2 μS/DIV

CH-2: 200 mV/DIV

2μS/DIV TRIG: B.B (CH-4)  $A = 0 \pm 50 \text{ nS}$ 

CH-2

 Adjust ORV3 and S3 so that the specification above is satisfied.

## 3-3-2. GEN LOCK Adjustment-2

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6  Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
STEP-2	NG  NTSG  NT	SC PHASE FINE adjustment  ◆RV2/DA-63 (D14)  SC PHASE COARSE S2/DA-63 (C14)
• Vectorscope 75%, SET UP L.DISP: SCH INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	OK  NTSC  Adjust ◆RV2 and S2 so that the specification above is satisfied.	

## (3-3-2. GEN LOCK Adjustment-2)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect  Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10) =	board with the EX-326 board.	
STEP-2	PGM OUT 1 (COMPOSITE)  NG  PRESETS  Tek	SC PHASE FINE adjustment PRV2/DA-63 (D14)  SC PHASE COARSE S2/DA-63 (C14)
Vectorscope 75% L.DISP: SCH INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	OK  PRESETS  A = 0 ± 0.5°  • Adjust ♥RV2 and S2 so that the specification above is satisfied.	

## 3-3-3. INT SC FREQUENCY Adjustment

<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connect</li> <li>Extension board: Extend the DA-63</li> <li>Switch setting: S3-2/SY-172 (L10) =</li> <li>Disconnect the GEN LOCK IN connection</li> </ul>	board with the EX-326 board. = ON	
STEP-2	CH-2: TP9/DA-63 (C7)	(Check)
Oscilloscope CH-2: 200 mV/DIV(AC) 100 nS/DIV TRIG: CH2	$A = 1.0 \pm 0.2 \ V \ p\text{-p}$ • Check that the specification above is satisfied.	
<ul> <li>STEP-3</li> <li>Adjust the oscilloscope as follows.</li> <li>CH2: 200 mV/DIV (AC).</li> <li>Connect Frequency counter to CH-2 OUT of oscilloscope.</li> </ul>	3.579545 MHz ± 5 Hz  • Check that D4 (B14) is off.	SC FREQUENCY adjustment PRV1/DA-63 (B8)

# (3-3-3. INT SC FREQUENCY Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect  Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10) =  Disconnect the GEN LOCK IN connect	board with the EX-326 board. - OFF	
STEP-2	CH-2: TP9/DA-63 (C7)	(Check)
	200m; B %100ns	
Oscilloscope CH-2: 200 mV/DIV(AC) 100 nS/DIV TRIG: CH2	$A = 1.0 \pm 0.2 \ V \ p\text{-p}$ • Check that the specification above is satisfied.	
STEP-3  • Adjust the oscilloscope as follows. CH2: 200 mV/DIV (AC).  • Connect Frequency counter to CH-2 OUT of oscilloscope.	4.433619 MHz ± 5 Hz  • Check that D4 (B14) is off.	SC FREQUENCY adjustment PRV1/DA-63 (B8)
STEP-4  • After this adjusting is completed, co	nnect the GEN LOCK IN connector of the rear panel ag	ain.

### 3-3-4. INT SC PHASE Adjustment

### FOR UC

**Adjusting Point** Machine conditions for adjustment Specifications STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the DA-63 board with the EX-326 board. • Switch setting: S3-2/SY-172 (L10) = ON • Disconnect the GEN LOCK IN connector of the rear panel. INT SC PHASE adjustment PGM OUT 1 (COMPOSITE) STEP-2 ØRV10/DA-63 (D9) NG OK + 1/2,1dB Vectorscope 75%, SET UP L.DISP: SCH  $A = 0 \pm 0.5^{\circ}$ INPUT : CH-A FILTER: FLAT GAIN: VAR • Adjust ORV10 so that the specification above is REF : INT satisfied. STEP-3

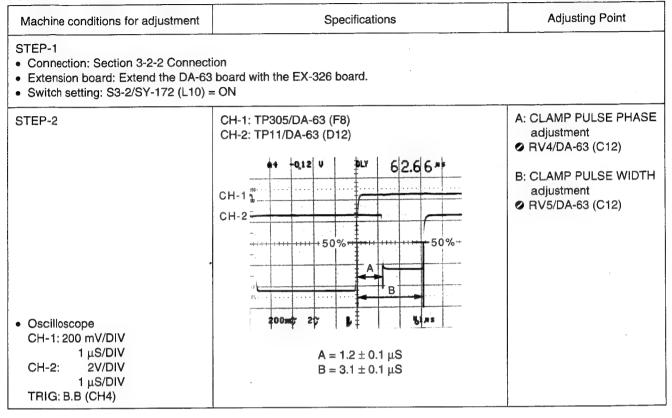
• After this adjustment is completed, connect the GEN LOCK IN connector of the rear panel again.

## (3-3-4. INT SC PHASE Adjustment)

FOR EK		
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-63  Switch setting: S3-2/SY-172 (L10)  Disconnect the GEN LOCK IN cont	B board with the EX-326 board. = OFF	
Disconnect the GEN LOCK IN connector or STEP-2  PGM	PGM OUT 1 (COMPOSITE)  NG  PRESETS  OK  PRESETS	INT SC PHASE adjustment PRV10/DA-63 (D9)
Vectorscope 75% L.DISP: SCH INPUT: CH-A FILTER: FLAT GAIN: VAR REF: INT	A = 0 ± 0.5°  • Adjust ⊘RV10 so that the specification above is satisfied.	

After this adjustment is completed, connect the GEN LOCK IN connector of the rear panel again.

## 3-3-5. CLAMP PHASE & WIDTH Adjustment



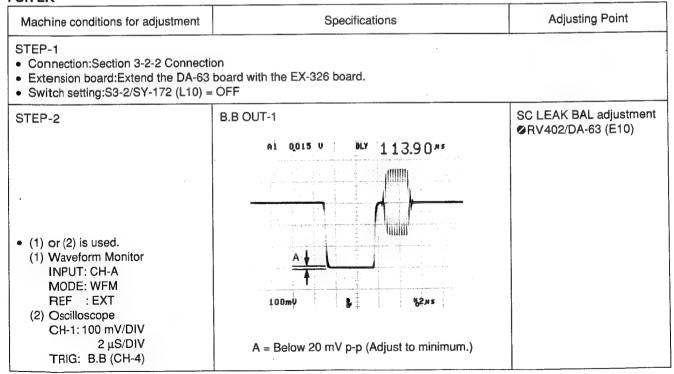
# (3-3-5. CLAMP PHASE & WIDTH Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6: Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
STEP-2	CH-1: TP305/DA-63 (F8) CH-2: TP11/DA-63 (D12)	A: CLAMP PULSE PHASE adjustment  ORV4/DA-63 (C12)
Oscilloscope    CH-1:200 mV/DIV	CH-1 CH-2 50% A B	B: CLAMP PULSE WIDTH adjustment   RV5/DA-63 (C12)
1 μS/DIV CH-2: 200 mV/DIV 1 μS/DIV TRIG: Β:Β (CH-4)	A = $1.2 \pm 0.1 \mu$ S B = $3.1 \pm 0.1 \mu$ S	

## 3-3-6. B.B OUT'S SC LEAK BALANCE Adjustment

### FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Conne Extension board: Extend the DA-6 Switch setting: S3-2/SY-172 (L10	63 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV	B.B OUT-1  A 4 5 5 5.1 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	SC LEAK BAL adjustment  RV402/DA-63 (E10)



# 3-3-7. MODURATION AXIS & B.B BURST BALANCE Adjustment (FOR EK ONLY)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10)	B board with the EX-326 board.	
STEP-2	B.B OUT-1  • Set on the circumstance  NG  PRESCTS	MODURATION AXIS adjustment PRV301/DA-63 (E8)
• Vectorscope 75% L.DISP: VECT INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	Adjust GAIN VR of the vector scope and  RV301so that the both spots of the BURST are on the circumference.	

# (3-3-7. MODURATION AXIS & B.B BURST BALANCE Adjustment (FOR EK ONLY))

Machine conditions for adjustment	Specifications	Adjusting Point
Machine conditions for adjustment STEP-3	B.B OUT-1  NG  PRESETS	BURST BALANCE adjustment PRV401/DA-63 (E9)
<ul> <li>Vectorscope</li> <li>75%</li> </ul>	OK PRESETS	
L.DISP: VECT INPUT: CH-A FILTER: FLAT GAIN: VAR REF: EXT	A = 90 ± 0.5°  • Adjust ◆RV401 so that the specification above is satisfied.	

### FOR UC

3-3-8. B.B OUTPUT GAIN Adjustment

**Adjusting Point** Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection Extension board: Extend the DA-63 board with the EX-326 board. Switch setting: S3-2/SY-172 (L10) = ON B.B OUT-1 A: B.B OUT GAIN STEP-2 adjustment **⊘**RV404/DA-63 (E14) B: SYNC LEVEL (B.B) adjustment ◆RV406/DA-63 (F12) • (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT (2) Oscilloscope CH-1: 100 mV/DIV  $A = 286 \pm 4 \text{ mV p-p}$ 2 µS/DIV  $B = 286 \pm 4 \text{ mV p-p}$ TRIG: B.B (CH-4)

### OR EK

Adjusting Point Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the DA-63 board with the EX-326 board. • Switch setting: S3-2/SY-172 (L10) = OFF A: B.B OUT GAIN B.B OUT-1 STEP-2 adjustment ◆RV404/DA-63 (E14) A1 0015 V 113.90\*\* B: SYNC LEVEL (B.B) adjustment ◆RV406/DA-63 (F12) • (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A 100mV MODE: WFM REF : EXT (2) Oscilloscope CH-1: 100 mV/DIV  $A = 300 \pm 4 \text{ mV p-p}$ 2 μS/DIV  $B = 300 \pm 4 \text{ mV p-p}$ TRIG: B.B (CH-4)



## 3-3-9. B.B BURST PHASE & WIDTH Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6: Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH4)	B.B OUT-1  A = 5.3 ± 0.1 μS B = 2.5 ± 0.1 μS  A = 5.3 ± 0.1 μS Company  A = 5.3 ± 0.1 μS Compan	A: BURST PHASE adjustment  RV9/DA-63 (B12)  B: BURST WIDTH adjustment  RV8/DA-63 (B12)

# (J-3-9. B.B BURST PHASE & WIDTH Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-6  Switch setting: S3-2/SY-172 (L10)	3 board with the EX-326 board.	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 μS/DIV TRIG: B.B (CH4)	B.B OUT-1  A1 0,015 0 113.9 0 45  100%  A = 5.60 ± 0.1 μS  B = 2.25 ± 0.1 μS  A = 5.60 ± 0.1 μS  A = 5.60 ± 0.1 μS  A = 5.60 ± 0.1 μS  B = 2.25 ± 0.1 μS  A = 5.60 ± 0.1 μS  A = 5.60 ± 0.1 μS  B = 2.25 ± 0.1 μS  A = 5.60	A: BURST PHASE adjustment PRV9/DA-63 (B12) B: BURST WIDTH adjustment RV8/DA-63 (B12)

## 3-3-10. KEY OUT GAIN Adjustment

Machine conditions for adjustment

STEP-1  Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-63  Switch setting: S3-2/SY-172 (L10)  S3-2/SY-172 (L10)  Control panel setting:  Select the PATTERN NUMBER  Push the AUTO TRANS buttor	B board with the EX-326 board.  = ON(For UC)  = OFF(For EK)  R = 1100.	
STEP-2	KEY OUT	KEY GAIN adjustment  ◆ RV516/DA-63 (H14)
<ul> <li>(1) or (2) is used.</li> <li>(1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT</li> <li>(2) Oscilloscope CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH4)</li> </ul>	A = 1000 ± 40 mV p-p	O R VSTO/DA-OS (TTT-)
STEP-3  Change the Oscilloscope setting to 200 mS/DIV. Same as STEP-2 except above setting.	B = 1050 ± 30 nS  • While changing S101 from 0 to F one level at a time, check that the phase of the waveform gradually delays.  Also check that the above specification is satisfied when it changes from F to 0.	(Check)

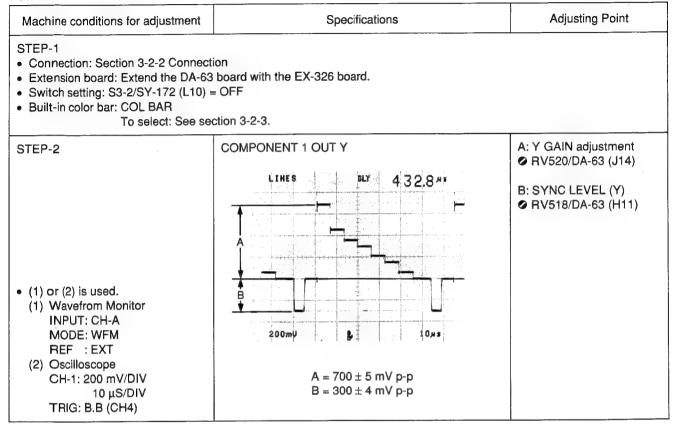
Specifications

Adjusting Point

# o-3-11. PGM OUT COMPONENT Y GAIN Adjustment

Machine conditions for adjustmen	t Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Conn</li> <li>Extension board: Extend the DA</li> <li>Switch setting: S3-2/SY-172 (L1)</li> <li>Built-in color bar: COL BAR To select: See</li> </ul>	-63 board with the EX-326 board. 0) = ON	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV TRIG: B.B (CH4)	A = 714 ± 5 mV p-p B = 286 ± 4 mV p-p	A: Y GAIN adjustment RV520/DA-63 (J14) B: SYNC LEVEL (Y) RV518/DA-63 (H11)

### (3-3-11. PGM OUT COMPONENT Y GAIN Adjustment)



## 3-3-12. PGM OUT BLK PHASE & WIDTH Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10)  S3-2/SY-172 (L10)  Built-in color bar: COL BKGD (100°  To select: See se	B board with the EX-326 board. = ON(For UC) = OFF(For EK) % WHITE)	
STEP-2	COMPONENT 1 OUT Y	A: BLK PHASE adjustment PRV7/DA-63 (B11)
	50% B 200mu B 200mu	<ul><li> RV7/DA-63 (B11)</li><li>B: BLK WIDTH adjustment</li><li> RV6/DA-63 (B11)</li></ul>
<ul> <li>(1) or (2) is used.</li> <li>(1) Waveform Monitor</li> <li>INPUT: CH-B1</li> <li>MODE: WFM</li> <li>REF : EXT</li> <li>(2) Oscilloscope</li> <li>CH-1: 200 mV/DIV</li> <li>2 μS/DIV</li> <li>TRIG: B.B (CH4)</li> </ul>	A = 1.5 ± 0.1 μS B = 10.9 ± 0.1 μS (For UC) 12.0 ± 0.1 μS (For EK)  • Adjust ♥RV6 and ♥RV7 so that the specifications above are satisfied. • The 50% above indicates the 50% of the levels of both VIDEO and SYNC respectively.	

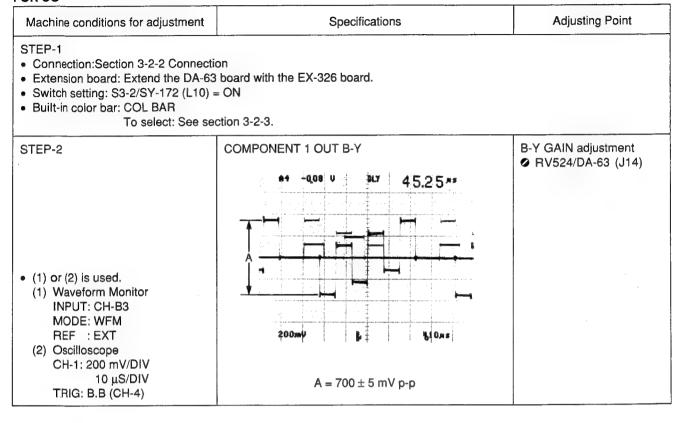
## 3-3-13. PGM OUT COMPONENT R-Y GAIN Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extend the DA-Switch setting: S3-2/SY-172 (L10)</li> <li>Built-in color bar: COLOR BAR To select: See</li> </ul>	63 board with the EX-326 board. 0) = ON	
• (1) or (2) is Used. (1) Wavefrom Monitor INPUT: CH-B2 MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV TRIG: B.B (CH-4)	COMPONENT 1 OUT R-Y  4	R-Y GAIN adjustment  RV522/DA-63 (J14)

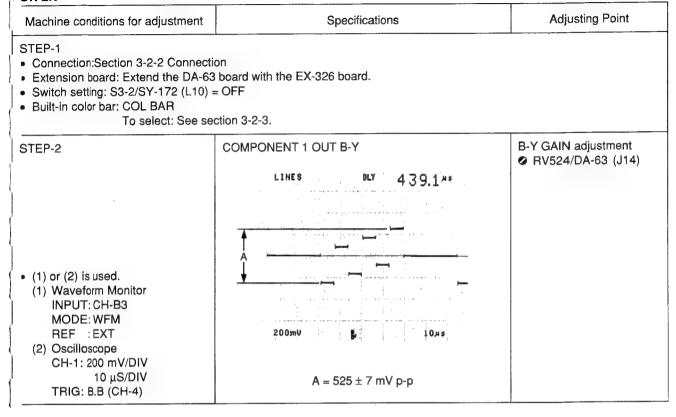
## ,3-3-13. PGM OUT COMPONENT R-Y GAIN Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) Built-in color bar: COLOR BAR To select: See se	B board with the EX-326 board. = OFF	
(1) or (2) is Used. (1) Wavefrom Monitor INPUT: CH-B2 MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV	COMPONENT 1 OUT R-Y  LINES 439.1 AS  200my B 10.48	R-Y GAIN adjustment PRV522/DA-63 (J14)
10 μS/DIV TRIG: B.B (CH-4)	$A = 525 \pm 7 \text{ mV p-p}$	

### 3-3-14. PGM OUT COMPONENT B-Y GAIN Adjustment



### -3-14. PGM OUT COMPONENT B-Y GAIN Adjustment)



### 3-3-15. Y/R-Y DELAY Adjustment

Adjusting Point Machine conditions for adjustment Specifications STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the DA-63 board with the EX-326 board. • Switch setting: S3-2/SY-172 (L10) = ON(For UC) S3-2/SY-172 (L10) = OFF(For EK) . Built-in color bar: COL BAR To select: See section 3-2-3. R-Y DELAY adjustment STEP-2 CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y) · Observe the fourth gradation of the component color bars (line between green and magenta) by 5.8 yS/DIV enlarging the time axis. CH-B2 CH-B1 .25 pS/DIV Waveform monitor INPUT: CH-B1 (COMPONENT Y) · Adjust so that the Y and R-Y signals have the same (COMPONENT R-Y) MODE: OVERLAY (Adjust so that the line between green and magenta REF : EXT become equal.)

## ა-3-16. Y/B-Y DELAY Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Section 3-2-2 Connection: Extension board: Extend the DA-65  Switch setting: S3-2/SY-172 (L10)  S3-2/SY-172 (L10)  Built-in color bar: COL BAR  To select:See se	B board with the EX-326 board.  = ON(For UC)  = OFF(For EK)	
STEP-2  Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B3: PGM OUT (COMPONENT B-Y)  5.8 ps/010  CH-B1	B-Y DELAY adjustment PRV523/DA-63 (J11)
Waveform monitor     INPUT: CH-B1     (COMPONENT Y)     CH-B3     (COMPONENT B Y)	Adjust so that the Y and B-Y signals have the sar	me

(Adjust so that the line between green and magenta

become equal.)

(COMPONENT B-Y)
MODE: OVERLAY

REF : EXT

## 3-3-17. COMPOSITE SC LEAK BALANCE Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10)  Built-in color bar: COL BAR  To select: See se	B board with the EX-326 board. = ON	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 μS/DIV TRIG: B.B (CH-4)	COMPOSITE OUT-1  A4 -000 V	SC LEAK (R-Y) adjustment  RV511/DA-63 (H7)  SC LEAK (B-Y) adjustment  RV514/DA-63 (H8)

# (ತ-3-17. COMPOSITE SC LEAK BALANCE Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connection:</li> <li>Extension board: Extend the DA-63</li> <li>Switch setting: S3-2/SY-172 (L10)</li> <li>Built-in color bar: COL BAR To select: See se</li> </ul>	B board with the EX-326 board. = OFF	•
STEP-2	COMPOSITE OUT-1	SC LEAK (R-Y) adjustment PRV511/DA-63 (H7)
<ul> <li>(1) or (2) is used.</li> <li>(1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT</li> <li>(2) Oscilloscope</li> </ul>	A 1 0,015 U DLY 113.90 Ms	SC LEAK (B-Y) adjustment PRV514/DA-63 (H8)
CH-1: 100 mV/DIV 2 μS/DIV TRIG: B.B (CH-4)	A = Below 20 mV p-p (Adjust to minimum.)	

## 3-3-18. COMPOSITE Y GAIN Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connection: Extension board: Extend the DA-60</li> <li>Switch setting: S3-2/SY-172 (L10)</li> <li>Built-in color bar: COL BAR To select: See see</li> </ul>	3 board with the EX-326 board. = ON	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope	COMPOSITE OUT-1  A4 -0.08 V PLY 35.75 A5  200mV B V V V V V V V V V V V V V V V V V V	A: COMPOSITE GAIN adjustment  RV507/DA-63 (K14)  B: SYNC LEVEL adjustment  RV504/DA-63 (L10)
CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH-4)	A = 714 ± 5 mV p-p B = 286 ± 4 mV p-p	

# (J-3-18. COMPOSITE Y GAIN Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6:</li> <li>Switch setting: S3-2/SY-172 (L10)</li> <li>Built-in color bar: COL BAR To select: See se</li> </ul>	3 board with the EX-326 board.  = OFF	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV TRIG: B.B (CH-4)	A = 700 ± 5 mV p-p B = 300 ± 4 mV p-p	A: COMPOSITE GAIN adjustment RV507/DA-63 (K14) B: SYNC LEVEL adjustment RV504/DA-63 (L10)

# 3-3-19. MODURATION AXIS Adjustment (FOR UC ONLY)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect  Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10) =	board with the EX-326 board.	
STEP-2  Select the INPUT 1 of BACKGROUND and FOREGROUND.  Setting the S1 of COMPONENT in the AD-76 board.  Disconnect CH-2 of the signal generator (TSG-300). (Disconnect B-Y signal)  Vectorscope 75%, SET UP L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	Adjust the phase shift knob of the vectorscope until its luminance points form a vertical line.	
<ul> <li>STEP-3</li> <li>Connect the CH-2 of the signal generator (TSG-300) and disconnect CH-3. (Disconnect B-Y signal)</li> <li>Vectorscope 75%, SET UP L.DISP: VECT INPUT: CH-A</li> </ul>	PGM OUT (COMPOSITE)  NTSC  NTS	MODURATION AXIS adjustment  ✓ RV301/DA-63 (E8)
FILTER: FLAT REF : EXT	Adjust PRV301 until the luminance points on the vectorscope form a horizontal line.	

## **კ-3-20. COMPOSITE C GAIN Adjustment**

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection Extension board: Extend the DA-63 Switch setting: S3-2/SY-172 (L10) = Built-in color bar: COL BAR To select: See sec	board with the EX-326 board. ON	
STEP-2	COMPOSITE OUT-1	C LEVEL adjustment  ◆ RV506/DA-63 (L11)
	Me B Market Mark	B-Y AXIS LEVEL adjustment ✔ RV512/DA-63 (H8)
Vectorscope     75%, SET UP     L.DISP: VECT     INPUT: CH-A     FILTER: FLAT     REF: EXT	All luminance points should be inside the respective "⊞" mark on the vectorscope.  • Adjust ⊘RV506 and ⊘RV521 so that MG, B, CY, G, YL and R satisfy the above specifications.	

## (3-3-20. COMPOSITE C GAIN Adjustment)

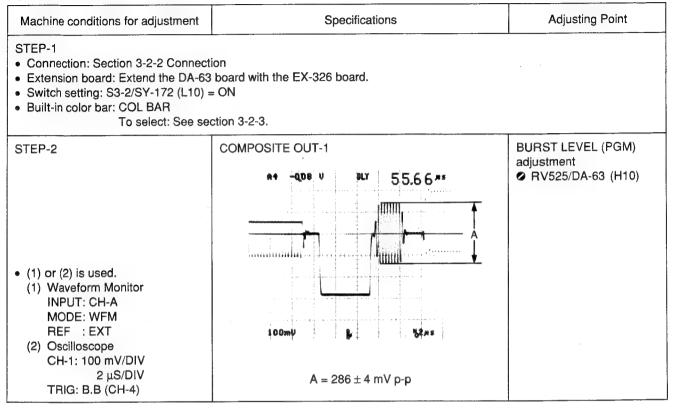
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect  Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10) =  Built-in color bar: COL BAR  To select: See se	B board with the EX-326 board. = OFF	
STEP-2	PRESETS	C LEVEL adjustment  ◆ RV506/DA-63 (L11)  B-Y AXIS LEVEL adjustment  ◆ RV512/DA-63 (H8)
Vectorscope 75% L.DISP: VECT INPUT: CH-A FILTER: FLAT REF: EXT	All luminance points should be inside the respective "田" mark on the vectorscope.  • Adjust ◆RV506 and ◆RV521 so that MG, mg, B, b, CY, cy, G, g, YL, yl, R and r satisfy the above specifications.	

# ა-3-21. COMPOSITE BURST BALANCE Adjustment (FOR EK ONLY)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect  Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10)	B board with the EX-326 board.	
STEP-2	NG PRESETS	BURST BALANCE adjustment  ② RV513/DA-63 (H7)
• Vectorscope 75% L.DISP: VECT INPUT: CH-A FILTER: FLAT	A = 90 ± 0.5°  Set the spot of BURST on the position of circumference by GAIN control on the vector scope.	

## 3-3-22. COMPOSITE BURST LEVEL Adjustment

## FOR UC

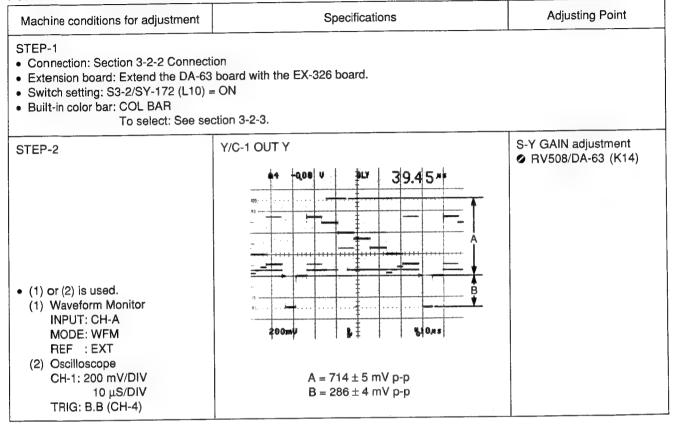


# (૩-3-22. COMPOSITE BURST LEVEL Adjustment)

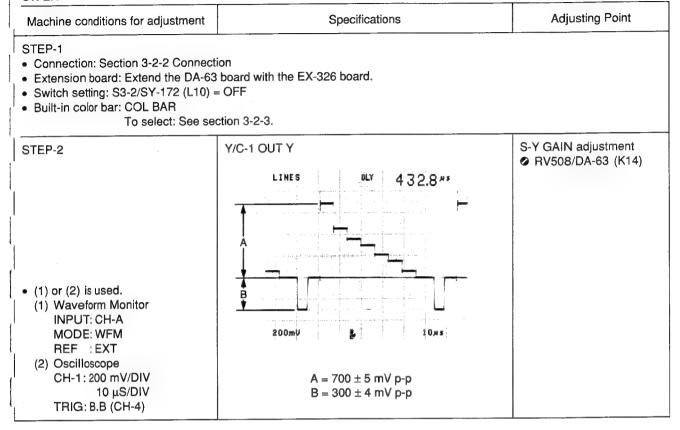
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connection: Extension board: Extend the DA-6: Switch setting: S3-2/SY-172 (L10) Built-in color bar: COL BAR To select: See se	3 board with the EX-326 board. = OFF	
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT (2) Oscilloscope CH-1: 100 mV/DIV 2 µS/DIV TRIG: B.B (CH-4)	COMPOSITE OUT-1  A1 0015 V 0LY 113.90 PS  100mV L 1 12.90 PS  A = 300 ± 4 mV p-p	BURST LEVEL (PGM) adjustment RV525/DA-63 (H10)

## 3-3-23. Y/C (S) Y GAIN Adjustment

## FOR UC



## 3-3-23. Y/C (S) Y GAIN Adjustment)



## 3-3-24. Y/C (S) C GAIN Adjustment

## FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connect</li> <li>Extension board: Extend the DA-63</li> <li>Switch setting: S3-2/SY-172 (L10)</li> <li>Built-in color bar: COL BAR To select: See se</li> </ul>	B board with the EX-326 board. = ON	
STEP-2	Y/C-1 OUT C	S-C GAIN adjustment  RV509/DA-63 (K14)
W	HE SON YL STEEL ST	
• Vectorscope 75%, SET UP	All luminance points should be inside the respective	
L.DISP: VECT INPUT: CH-A	"田" mark on the vectorscope.	
FILTER: FLAT REF : EXT	<ul> <li>Adjust ORV509 so that MG, B, CY, G, YL and R satisfy the above specifications.</li> </ul>	
STEP-3	Y/C-1 OUT C	(Check)
• (1) or (2) is used. (1) Waveform Monitor INPUT: CH-A MODE: WFM REF: EXT (2) Oscilloscope CH-1: 200 mV/DIV 10 µS/DIV	A4 -0,08 V BLY 35.75 A5 200mV 8 10A5	
TRIG: B.B (CH-4)	Check that the above waveform is displayed.	

# ر-3-24. Y/C (S) C GAIN Adjustment)

=	0		
	п	=	

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect  Extension board: Extend the DA-63  Switch setting: S3-2/SY-172 (L10) =  Built-in color bar: COL BAR  To select: See sec	board with the EX-326 board. = OFF	
STEP-2	PRESETS  BURST	S-C GAIN adjustment  RV509/DA-63 (K14)
<ul> <li>Vectorscope</li> <li>75%</li> <li>L.DISP: VECT</li> <li>INPUT: CH-A</li> <li>FILTER: FLAT</li> <li>REF: EXT</li> </ul>	All luminance points should be inside the respective "⊞" mark on the vectorscope.  • Adjust ②RV509 so that MG, mg, B, b, CY, cy, G, g, YL, yl, R and r satisfy the above specifications.	
<ul> <li>(1) or (2) is used.</li> <li>(1) Waveform Monitor INPUT: CH-A MODE: WFM REF : EXT</li> <li>(2) Oscilloscope CH-1: 200 mV/DIV 10 μS/DIV TRIG: B.B (CH-4)</li> </ul>	Y/C-1 OUT C  A1 -0.08 V DLY 35.75 #s  200mV L UU U U U U U U U U U U U U U U U U U	(Check)

## 3-4. AD-76 BOARD ADJUSTMENTS

## 3-4-1. COMPONENT CLAMP LEVEL Adjustment

#### **FOR UC**

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: COMPONENT 100% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = ON

- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

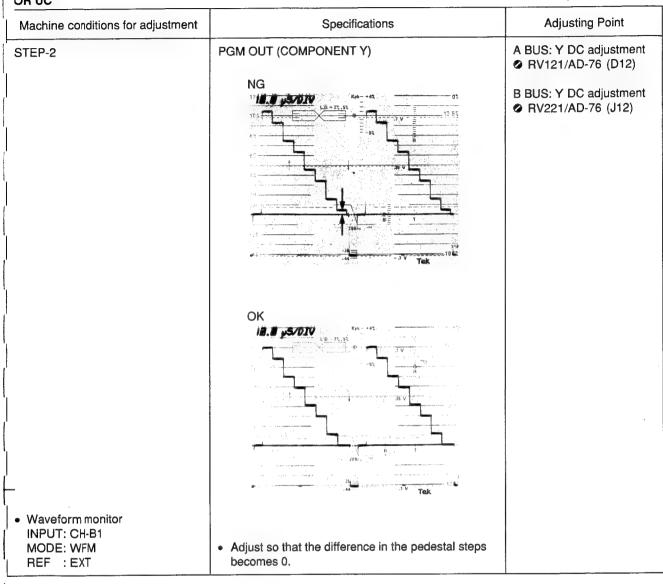
When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

## OR UC



## FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3	PGM OUT (COMPONENT R-Y)  NG  LD 72.95  SS 7 Tek	A BUS: R-Y DC adjustment RV122/AD-76 (C12)  B BUS: R-Y DC adjustment RV222/AD-76 (L12)
	OK 18.6 18.7010 16. 18.8 18.8 18.8 18.8 18.8 18.8 18.8	
Waveform monitor     INPUT: CH-B2     MODE: WFM     REF : EXT	Adjust so that the difference in the pedestal steps becomes 0.	

## FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-4	PGM OUT (COMPONENT B-Y)  NG  10. 12.57  12.5	A BUS: B-Y DC adjustmen  ◆ RV123/AD-76 (B12)  B BUS: B-Y DC adjustmen  ◆ RV223/AD-76 (K12)
Waveform monitor	OK 18.1 SOIL 19.1 SOIL 19.	
INPUT: CH-B3 MODE: WFM REF : EXT	Adjust so that the difference in the pedestal steps becomes 0.	

#### **FOR EK**

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment	Specifications	Adjusting Point
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## STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: COMPONENT 75% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = OFF

- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2	PGM OUT (COMPONENT Y)  NG  18.8 pS/DTV  Tek	A BUS: Y DC adjustment RV121/AD-76 (D12)  B BUS: Y DC adjustment RV221/AD-76 (J12)
	OK  IB.B yS/DIV  Tek	
<ul> <li>Waveform monitor</li> <li>INPUT: CH-B1</li> <li>MODE: WFM</li> <li>REF: EXT</li> </ul>	Adjust so that the difference in the pedestal steps becomes 0.	

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3	PGM OUT (COMPONENT R-Y)  NG  S. B. S. D. Tu	A BUS: R-Y DC adjustment RV122/AD-76 (C12)  B BUS: R-Y DC adjustment RV222/AD-76 (L12)
Waveform monitor INPLIT: CH-R2	OK	
INPUT: CH-B2 MODE: WFM REF : EXT	Adjust so that the difference in the pedestal steps becomes 0.	

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-4	PGM OUT (COMPONENT B-Y)  NG  18.8 psoiv	A BUS: B-Y DC adjustmen RV123/AD-76 (B12)  B BUS: B-Y DC adjustmen RV223/AD-76 (K12)
-	OK  IB. III pS/DTV  Tek	
Waveform monitor     INPUT: CH-B3     MODE: WFM     REF : EXT	Adjust so that the difference in the pedestal steps becomes 0.	

## 3-4-2. COMPONENT Y LEVEL Adjustment

#### FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 100% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = ON
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

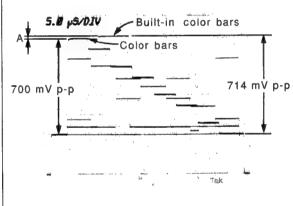
#### STEP-2

- Position of the fader lever:
   In the vicinity of the center
- The color bars of input 1 and the white(100%) of the built-in color bar should be seen simultaneously.

 Waveform monitor INPUT: CH-B1 MODE: WFM

REF : EXT

PGM OUT (COMPONENT Y)



- A = 14 mV p-p
- Adjust so that the difference between the color bars (Y) of input 1 and the built-in color bars (Y) becomes 14 mV p-p.

- A BUS: CPNT Y GAIN adjustment
- B BUS: CPNT Y GAIN adjustment
- RV217/AD-76 (J11)

## 3-4-2. COMPONENT Y LEVEL Adjustment)

#### FOR FK

OTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = OFF
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

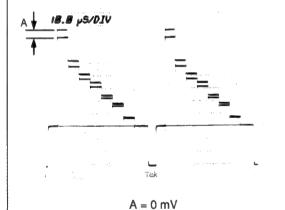
#### STEP-2

- Position of the fader lever:
   In the vicinity of the center
- The color bars of input 1 and the white(100%) of the built-in color bar should be seen simultaneously.

 Waveform monitor INPUT: CH-B1

MODE: WFM REF : EXT

## PGM OUT (COMPONENT Y)



 Adjust so that the difference between the color bars (Y) of input 1 and the built-in color bars (Y) becomes 0 mV.

(The color bars (Y) of input 1 and the built-in color

bars (Y) is 700 mV.)

A BUS: CPNT Y GAIN adjustment

◆ RV117/AD-76 (D10)

B BUS: CPNT Y GAIN adjustment

RV217/AD-76 (J11)

## 3-4-3, COMPONENT CHROMA LEVEL Adjustment

#### FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 100% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = ON
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER=Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12) When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

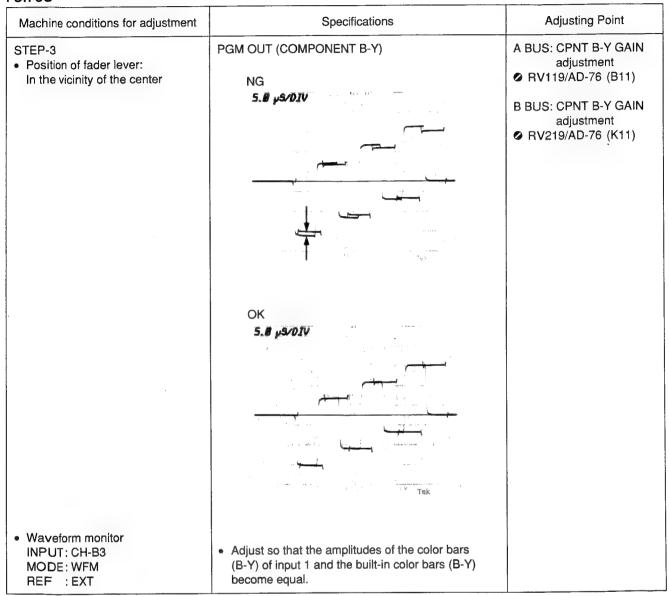
## (3-4-3. COMPONENT CHROMA LEVEL Adjustment)

# OR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2  • Position of fader lever: In the vicinity of the center	Specifications  PGM OUT (COMPONENT R-Y)  NG 5.8 ps/01V  OK 5.8 ps/01V	Adjusting Point  A BUS: CPNT R-Y GAIN adjustment  RV118/AD-76 (C11)  B BUS: CPNT R-Y GAIN adjustment  RV218/AD-76 (L11)
<ul> <li>Waveform monitor</li> <li>INPUT: CH-B2</li> <li>MODE: WFM</li> <li>REF: EXT</li> </ul>	Adjust so that the amplitudes of the color bars (R-Y) of input 1 and the built-in color bars (R-Y) become equal.	

## (3-4-3. COMPONENT CHROMA LEVEL Adjustment)

## FOR UC



### კ-4-3. COMPONENT CHROMA LEVEL Adjustment)

#### FOR EK

OTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board:Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = COMPONENT

S3-2/SY-172 (L10) = OFF

- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

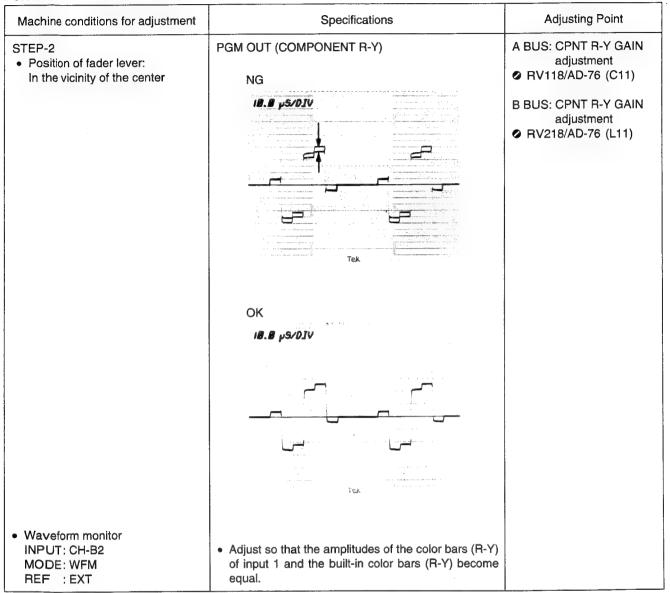
When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

## (3-4-3. COMPONENT CHROMA LEVEL Adjustment)



## (J-4-3. COMPONENT CHROMA LEVEL Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3 • Position of fader lever: In the vicinity of the center	PGM OUT (COMPONENT B-Y)  NG 18.8 ps.03V	A BUS: CPNT B-Y GAIN adjustment RV119/AD-76 (B11) B BUS: CPNT B-Y GAIN adjustment RV219/AD-76 (K11)
	Tek  OK  18.8 ps.030	
<ul> <li>Waveform monitor</li> <li>INPUT: CH-B3</li> <li>MODE: WFM</li> <li>REF: EXT</li> </ul>	Adjust so that the amplitudes of the color bars (B-Y) of input 1 and the built-in color bars (B-Y) become equal.	

## 3-4-4. W HD PHASE Adjustment

## FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connect</li> <li>Extension board: Extend the AD-76</li> <li>Test signal: 100% Color Bars</li> <li>Switch setting: S1/AD-76 (D1) = C6 S3-2/SY-172 (L10)</li> <li>NOTE: Adjust A BUS and B BUS in the connection of the</li></ul>	board with the EX-326 board.  OMPONENT  = ON	
STEP-2	A BUS: TP163/AD-76 (A9) B BUS: TP263/AD-76 (M13) 2.8 V dc	A BUS: VFO BIAS adjustment LV101/AD-76 (B10)  B BUS: VFO BIAS adjustment LV201/AD-76 (N13)
Digital voltmeter  STEP-3      Oscilloscope     MODE: DELAY     CH-1: 5 V/DIV         10 µS/DIV     CH-2: 2 V/DIV         200 mS/DIV  TRIG: CH-1	A BUS CH-1: TP156/AD-76 (A7) CH-2: TP158/AD-76 (A8) B BUS CH-1: TP256/AD-76 (M10) CH-2: TP258/AD-76 (M11)  A1 24 V DLY 62.55 Ms  CH-2 CH-1 50%  A = B	A BUS: W HD PHASE adjustment RV131/AD-76 (B8)  B BUS: W HD PHASE adjustment RV231/AD-76 (N12)

# (उ-4-4. W HD PHASE Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
<ul> <li>STEP-1</li> <li>Connection: Section 3-2-2 Connect</li> <li>Extension board: Extend the AD-76</li> <li>Test signal: 75% Color Bars</li> <li>Switch setting: S1/AD-76 (D1) = C0 S3-2/SY-172 (L10) =</li> </ul>	board with the EX-326 board.  DMPONENT  OFF	
NOTE: Adjust A BUS and B BUS in the	ne same way for each bus.	
STEP-2	A BUS: TP163/AD-76 (A9) B BUS: TP263/AD-76 (M13)	A BUS: VFO BIAS adjustment  ◆ LV101/AD-76 (B10)
Digtal voltmeter	2.8 V dc	B BUS: VFO BIAS adjustment LV201/AD-76 (N13)
STEP-3	A BUS CH-1: TP156/AD-76 (A7) CH-2: TP158/AD-76 (A8) B BUS CH-1: TP256/AD-76 (M10) CH-2: TP258/AD-76 (M11)  A1 1,20 V DLY 6 3.1 2 M5 CH-2 CH-1	A BUS: W HD PHASE adjustment RV131/AD-76 (B8) B BUS: W HD PHASE adjustment RV231/AD-76 (N12)
Oscilloscope MODE: DELAY CH-1: 5 V/DIV 10 µS/DIV CH-2: 2 V/DIV 200 mS/DIV TRIG: CH-1	10 20 A B 1,200ns A = B	

## 3-4-5. COMPONENT Y/C DELAY Adjustment

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: BOWTIE
- Switch setting: S1/AD-76 (D1) = COMPONENT S3-2/SY-172 (L10) = ON (For UC) S3-2/SY-172 (L10) = OFF (For EK)
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13) When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

- 4. FOREGROUND BUS = 1
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the bottom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A Boo and B Boo in the same way for sach boo.			
STEP-2	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y) CH-B3: PGM OUT (COMPONENT B-Y)  18.8 ps/01V  Y/R-Y A  Y/B-Y B  (11)	Y/R-Y DELAY A BUS: CPNT V DL adjustment FL114/AD-76 (C10) Adjusting point: DD B BUS: CPNT V DL adjustment FL214/AD-76 (L10) Adjusting point: DD	
Waveform monitor     MEASURE : BOWTIE     INPUT : CH-B1	Tek		
CH-B3 (COMPONENT B-Y)  MODE : WFM  REF : EXT	A = $0 \pm 10 \text{ nS}$ • Set the each BOWTIE DIP point A and B on the center marker.	NOTE: Do not touch adjusting points other than the above.	

# (3-4-5. COMPONENT Y/C DELAY Adjustment)

Machine conditions for adjustment	ne conditions for adjustment Specifications	
STEP-3	CH-B1:PGM OUT (COMPONENT Y) CH-B2:PGM OUT (COMPONENT R-Y) CH-B3:PGM OUT (COMPONENT B-Y)  **B.***  Y/R-Y A  Y/B-Y B  (1)  Y/B-Y B  (1)  Y/B-Y B	Y/B-Y DELAY A BUS: CPNT U DL adjustment FL115/AD-76 (B10) Adjusting point: DD B BUS: CPNT U DL adjustment FL215/AD-76 (K10) Adjusting point: DD
Waveform monitor     MEASURE: BOWTIE     INPUT : CH-B1	Tek	
(COMPONENT R-Y) CH-B3 (COMPONENT B-Y) MODE : WFM REF : EXT	$B = 0 \pm 10 \text{ nS}$ • Set the each BOWTIE DIP point A and B on the center marker.	NOTE: Do not touch adjusting points other than the above.

## 3-4-6. Y/C Input Y LEVEL Adjustment

#### FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment	Specifications	Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

## (3-4-6. Y/C Input Y LEVEL Adjustment)

# OR UC Machine conditions for adjustment Specifications **Adjusting Point** PGM OUT (Y/C Y or COMPONENT) A BUS: SEP Y GAIN adjustment Position of the fader lever: RV111/AD-76 (D8) Position at which 100% WHITE NG can be compared. 5.8 µS/DIV B BUS: SEP Y GAIN Color bars of input 1 adjustment 100% WHITE RV211/AD-76 (J8) Built-in 100% WHITE color bars OK Waveform monitor INPUT: CH-A · Adjust so that there is no difference between the MODE: WFM color bars of input 1 and the built-in color bars. REF : EXT

## (3-4-6. Y/C Input Y LEVEL Adjustment)

#### FOR EK

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

•	·		
Machine conditions for adjustment		Specifications	Adjusting Point
			A

### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = OFF
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

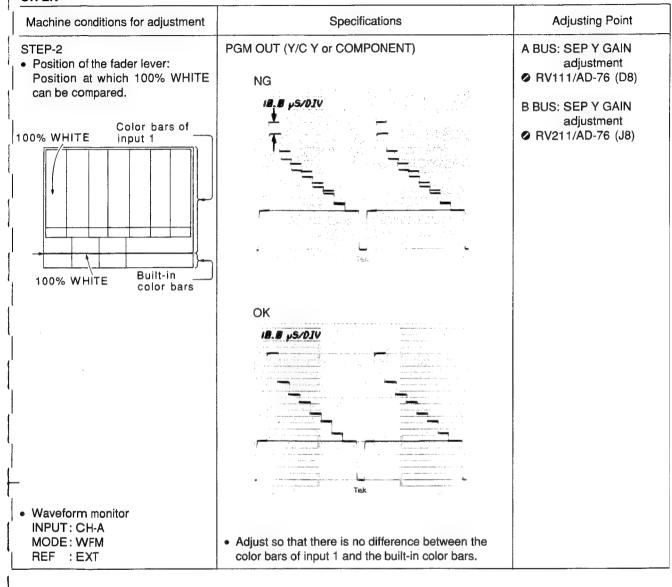
When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

## (3-4-6. Y/C Input Y LEVEL Adjustment)



## 3-4-7. CHROMA DECODER CLOCK FREQUENCY Adjustment

### FOR UC

Adjusting Point Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars) Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON· Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 1 NOTE: Adjust A BUS and B BUS in the same way for each bus. A BUS: TP123/AD-76 (D8) A BUS: COLOR F LOCK STEP-2 B BUS: TP223/AD-76 (L8) adjustment CV101/AD-76 (C7) NG B BUS: COLOR F LOCK adjustment **⊘** CV201/AD-76 (L7) OK 20m2 20 Ms % Oscilloscope CH-1: 20 mV/DIV 20 uS/DIV A = Minimum TRIG: B.B (CH-4)

### 3-4-7. CHROMA DECODER CLOCK FREQUENCY Adjustment)

#### **FOR EK**

**Adjusting Point** Machine conditions for adjustment Specifications STEP-1 • Connection: Section 3-2-2 Connection • Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 75% Color Bars Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = OFF · Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 1 NOTE: Adjust A BUS and B BUS in the same way for each bus. A BUS: TP123/AD-76 (D8) A BUS: COLOR F LOCK STEP-2 B BUS: TP223/AD-76 (L8) adjustment CV101/AD-76 (C7) NG B BUS: COLOR F LOCK adjustment O CV201/AD-76 (L7) OK

· Adjust so that wavefome becomes flat as possible.

Oscilloscope

CH-1: 20 mV/DIV 500 μS/DIV

TRIG: B.B (CH-4)

## 3-4-8. Y/C CHROMA LEVEL Adjustment

### FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: Y/C (S), 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON
- Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

- 4. FOREGROUND BUS = INT VIDEO (COL BAR)
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the bottom of the fader lever.

Adjustment can be performed for each bus.

## (3-4-8. Y/C CHROMA LEVEL Adjustment)

DR UC			
Machine conditions for adjustment	Specifications	Adjusting Point	
STEP-2  Adjust to mechanical center.  A BUS: RV114	PGM OUT (Y/C C or COMPOSITE)  NG	A BUS: SEP C GAIN adjustment ■ RV112/AD-76 (C7)	
B BUS: RV214  Adjust the phase of the chroma. A BUS: RV113	Barrier Mo	CPST & SEP HUE SET adjustment  ● RV113/AD-76 (C7)	
B BUS: RV213  Adjust in the vertical direction. A BUS: RV112	71	SEP B-Y GAIN adjustment RV115/AD-76 (B10)	
<ul> <li>B BUS: RV212</li> <li>Adjust in the horizontal direction.</li> <li>A BUS: RV115</li> <li>B BUS: RV215</li> </ul>		B BUS: SEP C GAIN adjustment ✔ RV212/AF-76 (L10)	
	The state of the s	CPST & SEP HUE SET adjustment  ② RV213/AD-76 (L7)	
	ОК	SEP B-Y GAIN adjustment PRV215/AD-76 (K10)	
	M. M		
_	Tes		
	Managhal Scorpers		
<ul><li>Vectorscope</li><li>L.DISP: VECT</li><li>INPUT: CH-A</li></ul>	All luminance points should be inside the respective "田" mark on the vectorscope.		
FILTER: FLAT REF : EXT	Adjust so that both the phase and the level A BUS and B BUS of become equal.		

### (3-4-8. Y/C CHROMA LEVEL Adjustment)

#### **FOR EK**

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: Y/C (S), 75% Color Bars
- Switch setting: S1/AD-76 (D1) = Y/C

S3-2/SY-172 (L10) = OFF

- Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

# (3-4-8. Y/C CHROMA LEVEL Adjustment)

# OR EK

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2  Adjust to mechanical center. A BUS: RV114 B BUS: RV214  Adjust the phase of the chroma. A BUS: RV113 B BUS: RV213  Adjust in the vertical direction. A BUS: RV112 B BUS: RV212  Adjust in the horizontal direction. A BUS: RV115 B BUS: RV215	PGM OUT (Y/C C or COMPOSITE)  NG  PRESETS	A BUS: SEP C GAIN adjustment  PRV112/AD-76 (C7) CPST & SEP HUE SET adjustment  RV113/AD-76 (C7) SEP B-Y GAIN adjustment  RV115/AD-76 (B10)  B BUS: SEP C GAIN adjustment  RV212/AF-76 (L10) CPST & SEP HUE SET adjustment  RV213/AD-76 (L7) SEP B-Y GAIN adjustment  RV215/AD-76 (K10)
	OK PRESETS	
Vectorscope     L.DISP: VECT     INPUT: CH-A     FILTER: FLAT     REF: EXT	All luminance points should be inside the respective "田" mark on the Vectorscope.  • Adjust so that both the phase and the level of A BUS and B BUS become equal.	

#### FOR UC

NOTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specification Adju	sting Point
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#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = ON
- · Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points

When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button.

- 4. FOREGROUND BUS = 1
- 5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the buttom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

Machine conditions for adjustment	Specification	Adjusting Point
Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y)  5.8 ps/biv  CH-B2  CH-B1	A BUS: Y/R-Y DL adjustment FL111/AD-76 (D9) Adjusting point: DD B BUS: Y/R-Y DL adjustment FL211/AD-76 (L9) Adjusting point: DD
-	. 25 µ\$/01V	
Waveform monitor INPUT: CH-B1 (COMPONENT Y) CH-B2 (COMPONENT R-Y) MODE: OVERLAY REF: EXT	Adjust so that the phases of the Y and R-Y signals have the same phase.  (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.

# FOR UC

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3  Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.  Waveform monitor	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT B-Y)  5.8 ps/010  CH-B1	A BUS: Y/B-Y DL adjustment FL112/AD-76 (C9) Adjusting point: B BUS: Y/B-Y DL adjustment FL212/AD-76 (K9) Adjusting point:
INPUT: CH-B1 (COMPONENT Y) CH-B3 (COMPONENT B-Y) MODE: OVERLAY REF: EXT	Adjust so that the phases of the Y and B-Y signals have the same phase.  (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.

#### FOR EK

OTE: Perform this adjustment after completing all the adjustments for the DA-63 board.

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars
- Switch setting: S1/AD-76 (D1) = Y/C S3-2/SY-172 (L10) = OFF

· Control panel setting:

- 1. PATTERN NUMBER = 4 (REVERSE = OFF)
- 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
- 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

Press the AUTO TRANS button.

4. FOREGROUND =1

5. The signal of A BUS is output at the top of the fader lever.

The signal of B BUS is output at the bottom of the fader lever.

Adjustment can be performed for each bus.

NOTE: Adjust A BUS and B BUS in the same way for each bus.

# FOR EK

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-2  Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B2: PGM OUT (COMPONENT R-Y)  5.  ps/DJV  OFFSET HENLI OFF ON	A BUS: Y/R-Y DL adjustment FL111/AD-76 (D9) Adjusting point:  B BUS: Y/R-Y DL adjustment FL211/AD-76 (L9) Adjusting point:
	.50 ps/0JV  DFFSET  HENU  TTEK	
Waveform monitor INPUT: CH-B1 (COMPONENT Y) CH-B2 (COMPONENT R-Y) MODE: OVERLAY REF: EXT	Adjust so that the phases of the Y and R-Y signals have the same phase.  (Adjust so that the line between green and magenta become equal.)	NOTE: Do not touch adjusting points other than the above.

# FOR EK

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3  Observe the fourth gradation of the component color bars (line between green and magenta) by enlarging the time axis.	CH-B1: PGM OUT (COMPONENT Y) CH-B3: PGM OUT (COMPONENT B-Y)  5.8 ps/01v  CH-B3  CH-B1	A BUS: Y/B-Y DL adjustment FL112/AD-76 (C9) Adjusting point: B BUS: Y/B-Y DL adjustment FL212/AD-76 (K9) Adjusting point:
	Jek	
<ul> <li>Waveform monitor</li> <li>INPUT: CH-B1         <ul> <li>(COMPONENT Y)</li> <li>CH-B3</li></ul></li></ul>	<ul> <li>Adjust so that the phases of the Y and B-Y signals have the same phase.</li> <li>(Adjust so that the line between green and magenta become equal.)</li> </ul>	NOTE: Do not touch adjusting points other than the above.

# 3-4-10. APC LOCK Adjustment

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1  Connection: Section 3-2-2 Connect Extension board: Extend the AD-76 Test signal: 75% Color Bars  Switch setting: S1/AD-76 (D1) = C0 S3-2/SY-172 (L10) = S3-2/SY-172 (L10) = Control panel setting: PATTERN NUMBER = 4 (REVEI PATTERN NUMBER = 4 (REVEI SERVER = Move it fully to BACKGROUND BUS = 1, FORE	board with the EX-326 board.  OMPOSITE  ON (For UC)  OFF (For EK)  RSE = OFF)  the top and bottom several times and set it at the top.  GROUND BUS = 1	
STEP-2	A BUS: TP116/AD-76 (G4) B BUS: TP216/AD-76 (H4)   GND  A = 3.5 to 4.5 V dc  Turn A BUS: ②RV103 or B BUS: ②RV203 in the clockwise direction fully and check that the specification above is satisfied.	A BUS: APC LOCK adjustment  RV103/AD-76 (F4)  B BUS: APC LOCK adjustment  RV203/AD-76 (H4)
Digital voltmeter	specification above is satisfied.	

# (3-4-10. APC LOCK Adjustment)

Machine conditions for adjustment	Specifications	Adjusting Point
STEP-3  • Digital voltmeter	A BUS: TP116/AD-76 (G4) B BUS: TP216/AD-76 (H4)   A A A A A A A A A A A A A A A A A A	A BUS: APC LOCK adjustment  RV103/AD-76 (F4)  B BUS: APC LOCK adjustment  RV203/AD-76 (H4)
<ul> <li>STEP-4</li> <li>Disconnect the VIDEO IN BNC connector.</li> <li>Digital voltmeter</li> </ul>	A BUS: TP116/AD-76 (G4)     B BUS: TP216/AD-76 (H4)      Check that the level becomes approximately 0 V, re-connect the BNC connector of VIDEO IN1 and check that the level becomes approximately 2.2 V dc again.	(Check)

## 3-4-11. COMPOSITE Y LEVEL Adjustment

#### FOR UC

Adjusting Point Machine conditions for adjustment Specifications STEP-1 • Connection: Section 3-2-2 Connection Extension board: Extend the AD-76 board with the EX-326 board. Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars) • Switch setting: S1/AD-76 (D1) = COMPOSITE S3-2/SY-172 (L10) = ON · Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2 After completing the above settings, check that the Y signal has been output. Test points When adjusting A BUS: TP141/AD-76 (D13) When adjusting B BUS: TP241/AD-76 (J12) When the waveform is not displayed Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus. 4. FOREGROUND BUS = INT VIDEO (COL BAR) NOTE: Adjust A BUS and B BUS in the same way for each bus. STEP-2 PGM OUT (COMPONENT Y or COMPOSITE) A BUS: CPST Y GAIN adjustment Position of fader lever: 5.8 pS/DIV RV101/AD-76 (E2) Position at which 100% WHITE can be compared. B BUS: CPST Y GAIN adjustment Color bars of 100% WHITE input 1 Built-in 100% WHITE color bars

Waveform monitor

INPUT: CH-A MODE: WFM REF : EXT

 Adjust so that there is no difference between the color bars of input 1 and the built-in color bars.

### (3-4-11. COMPOSITE Y LEVEL Adjustment)

#### **FOR EK**

Machine conditions for adjustment Specifications Adjusting Point

#### STEP-1

- Connection: Section 3-2-2 Connection
- Extension board: Extend the AD-76 board with the EX-326 board.
- Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars)
- Switch setting: S1/AD-76 (D1) = COMPOSITE S3-2/SY-172 (L10) = OFF
- Control panel setting:
  - 1. PATTERN NUMBER = 4 (REVERSE = OFF)
  - 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top.
  - 3. BACKGROUND BUS = 1, FOREGROUND BUS = 2

After completing the above settings, check that the Y signal has been output.

Test points When adjusting A BUS: TP141/AD-76 (D13)

When adjusting B BUS: TP241/AD-76 (J12)

When the waveform is not displayed

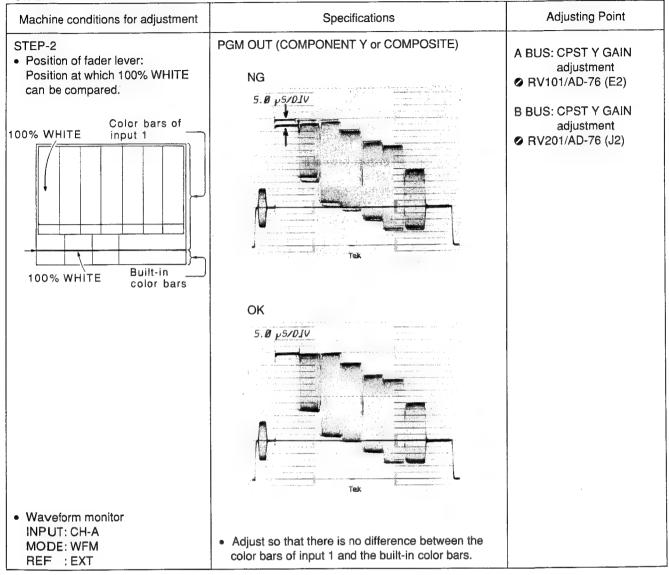
Press the AUTO TRANS button and check that the Y signal has been output at the test point of the adjusted bus.

4. FOREGROUND BUS = INT VIDEO (COL BAR)

NOTE: Adjust A BUS and B BUS in the same way for each bus.

# (3-4-11. COMPOSITE Y LEVEL Adjustment)

### **FOR EK**



# 5-4-12. COMPOSITE CHROMA LEVEL Adjustment

#### FOR UC

Adjusting Point Specifications Machine conditions for adjustment STEP-1 • Connection: Section 3-2-2 Connection Extension board: Extend the AD-76 board with the EX-326 board. • Test signal: 75% Color Bars (100/7.5/77/7.5 Color Bars) Switch setting: S1/AD-76 (D1) = COMPOSITE S3-2/SY-172 (L10) = ON Control panel setting: 1. PATTERN NUMBER = 4 (REVERSE = OFF) 2. FADER LEVER = Move it fully to the top and bottom several times and set it at the top. 3. BACKGROUND BUS = 1, FOREGROUND BUS = 1 NOTE: Adjust A BUS and B BUS in the same way for each bus. A BUS: CPST C GAIN A BUS: TP122/AD-76 (B7) STEP-2 adjustment B BUS: TP222/AD-76 (K7) ◆ RV102/AD-76 (E2) 100.60 ME 0,06 U **B BUS: CPST C GAIN** adjustment RV202/AD-76 (H2) %10µs

 $A = 100 \pm 5 \text{ mV p-p}$ 

(A: Burst amplitude)

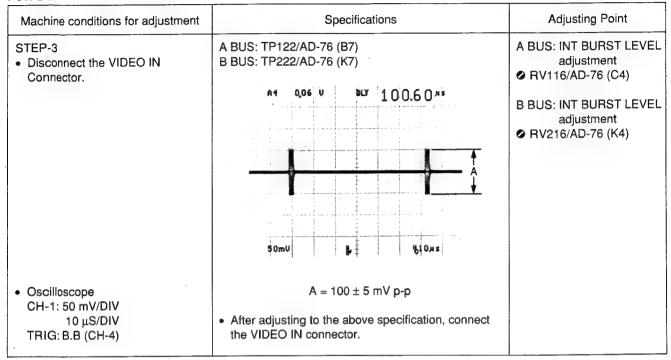
 Oscilloscope CH-1: 50 mV/DIV

10 μS/DIV

TRIG: B.B (CH-4)

# (3-4-12. COMPOSITE CHROMA LEVEL Adjustment)

## **FOR UC**



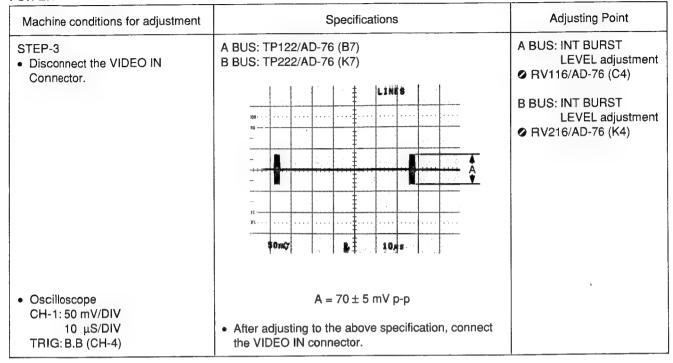
# -4-12. COMPOSITE CHROMA LEVEL Adjustment)

# FOR EK

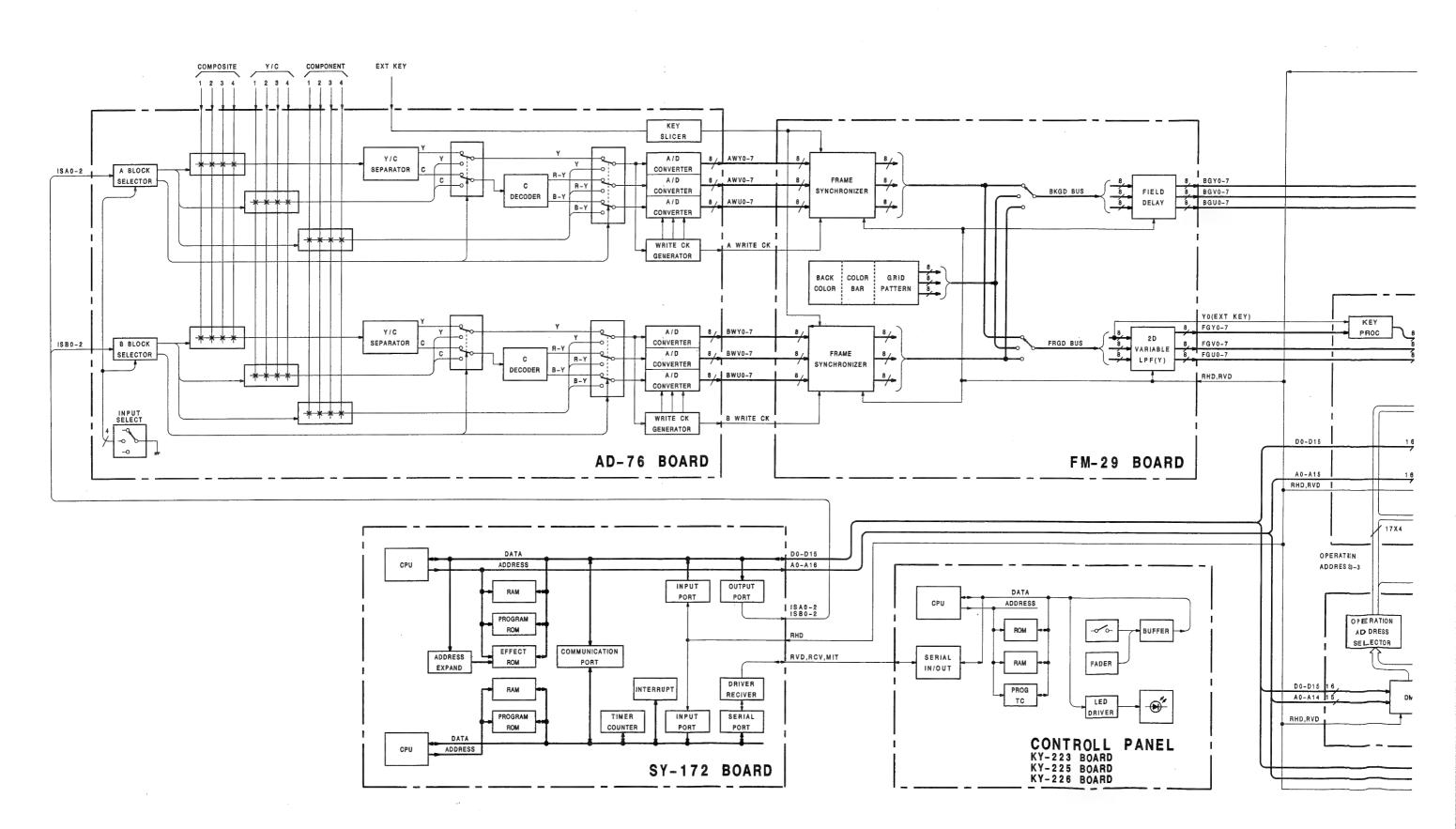
Machine conditions for adjustment	Specifications	Adjusting Point
STEP-1 Connection: Section 3-2-2 Connect Extension board: Extend the AD-76 Test signal: 75% Color Bars Switch setting: S1/AD-76 (D1) = C0 S3-2/SY-172 (L10) = Control panel setting: 1. PATTERN NUMBER = 4 (REVE) 2. FADER LEVER = Move it fully to 3. BACKGROUND BUS = 1, FORE	DMPOSITE  OFF  RSE = OFF)  the top and bottom several times and set it at the top.  GROUND BUS = 1	
• Oscilloscope CH-1: 50 mV/DIV 10 µS/DIV TRIG: B.B (CH-4)	A BUS: TP122/AD-76 (B7) B BUS: TP222/AD-76 (K7)  A = 100 ± 5 mV p-p (A: Burst amplitude)	A BUS: CPST C GAIN adjustment RV102/AD-76 (E2) B BUS: CPST C GAIN adjustment RV202/AD-76 (H2)

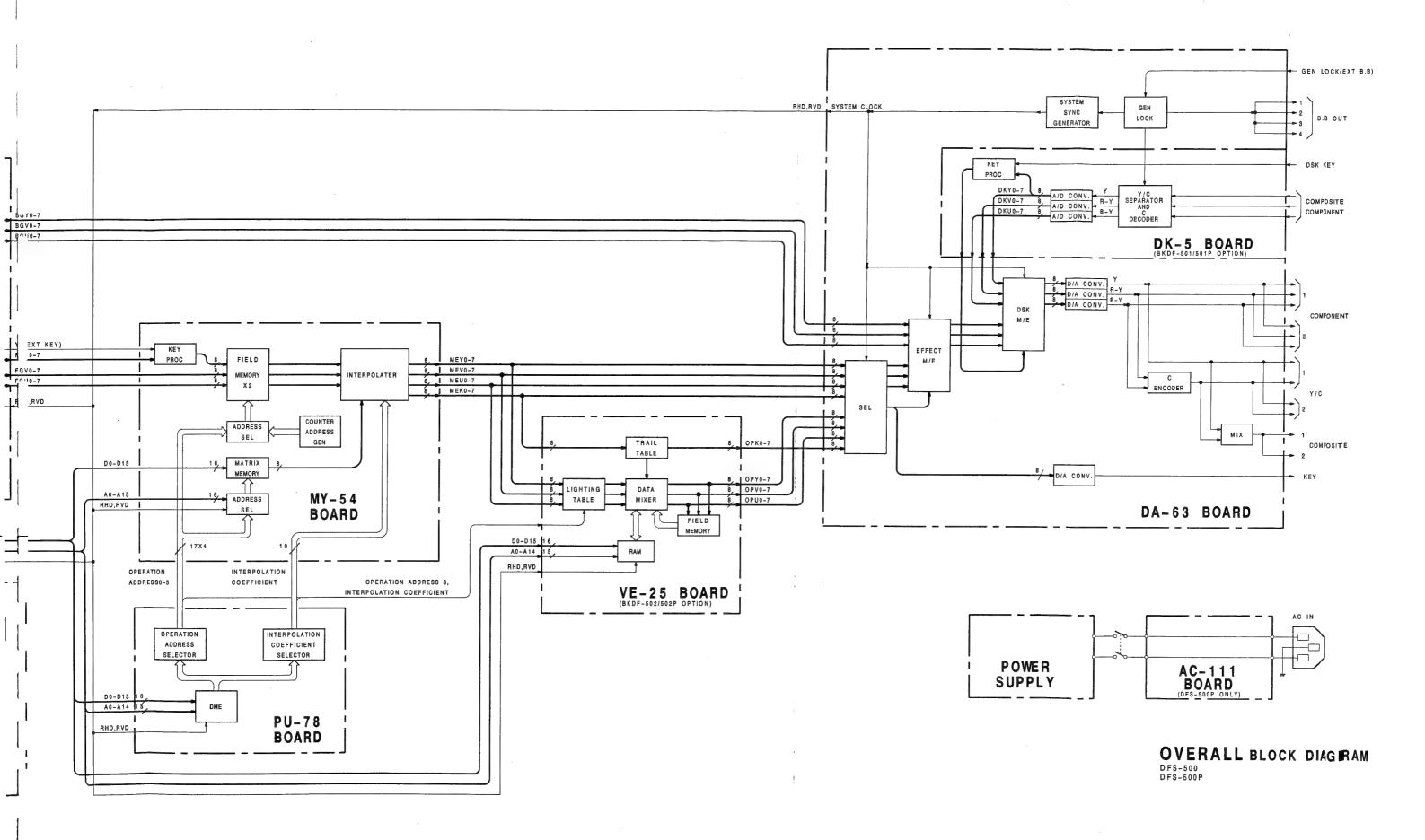
# (3-4-12. COMPOSITE CHROMA LEVEL Adjustment)

## FOR EK

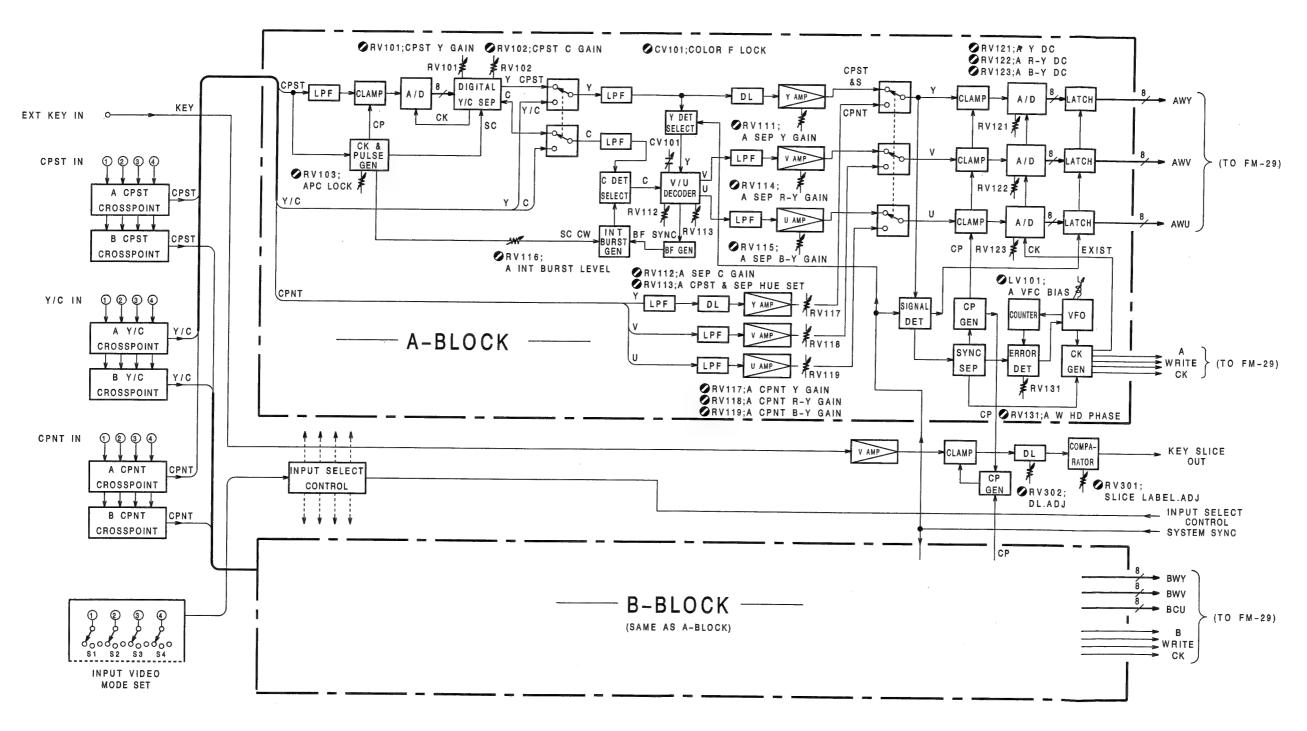


# SECTION 4 BLOCK DIAGRAMS





# AD-76; A/D Converter



AD-76 BLOCK DIAGRAM
DFS-500
DFS-500P

(TO FM-29)

} ([O FM-29]

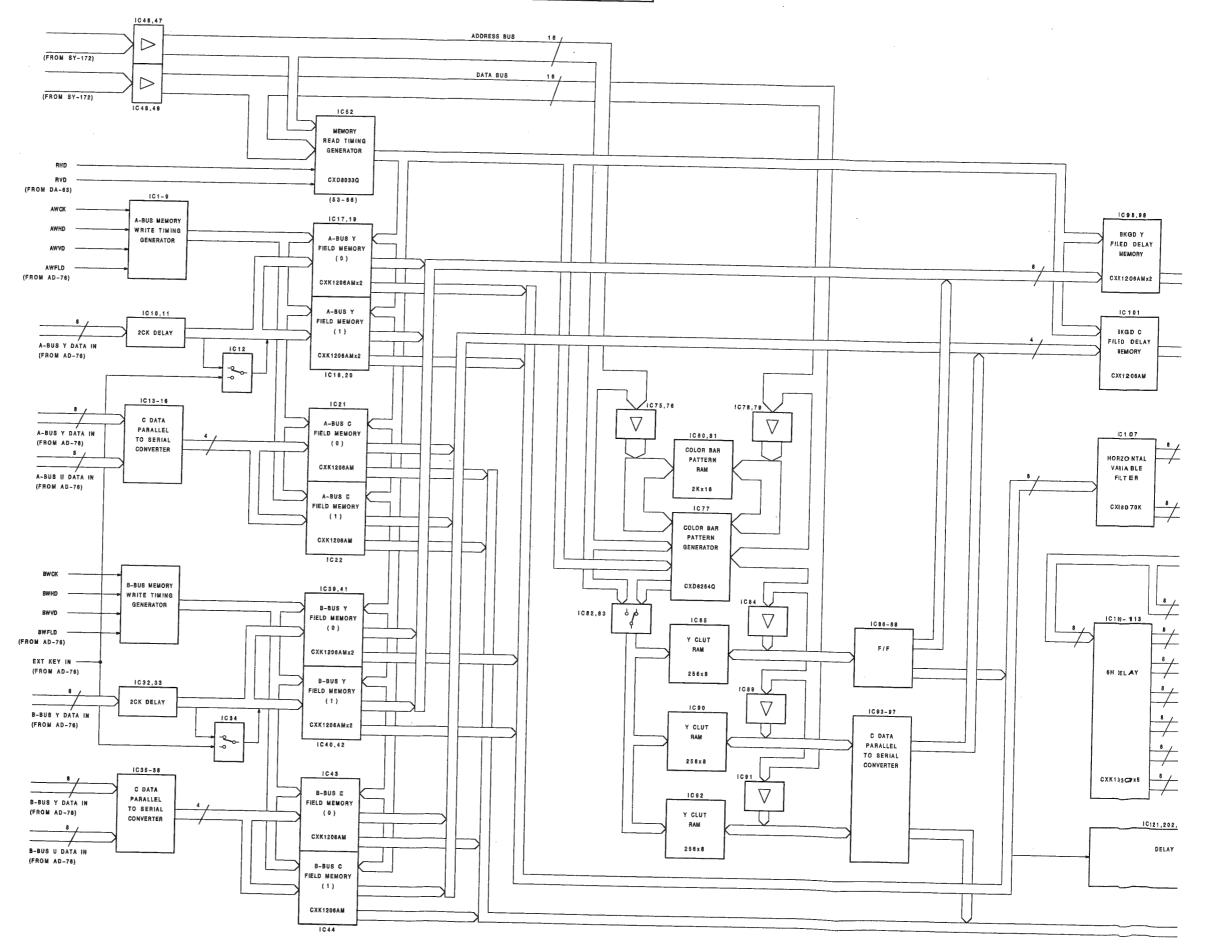
SL =

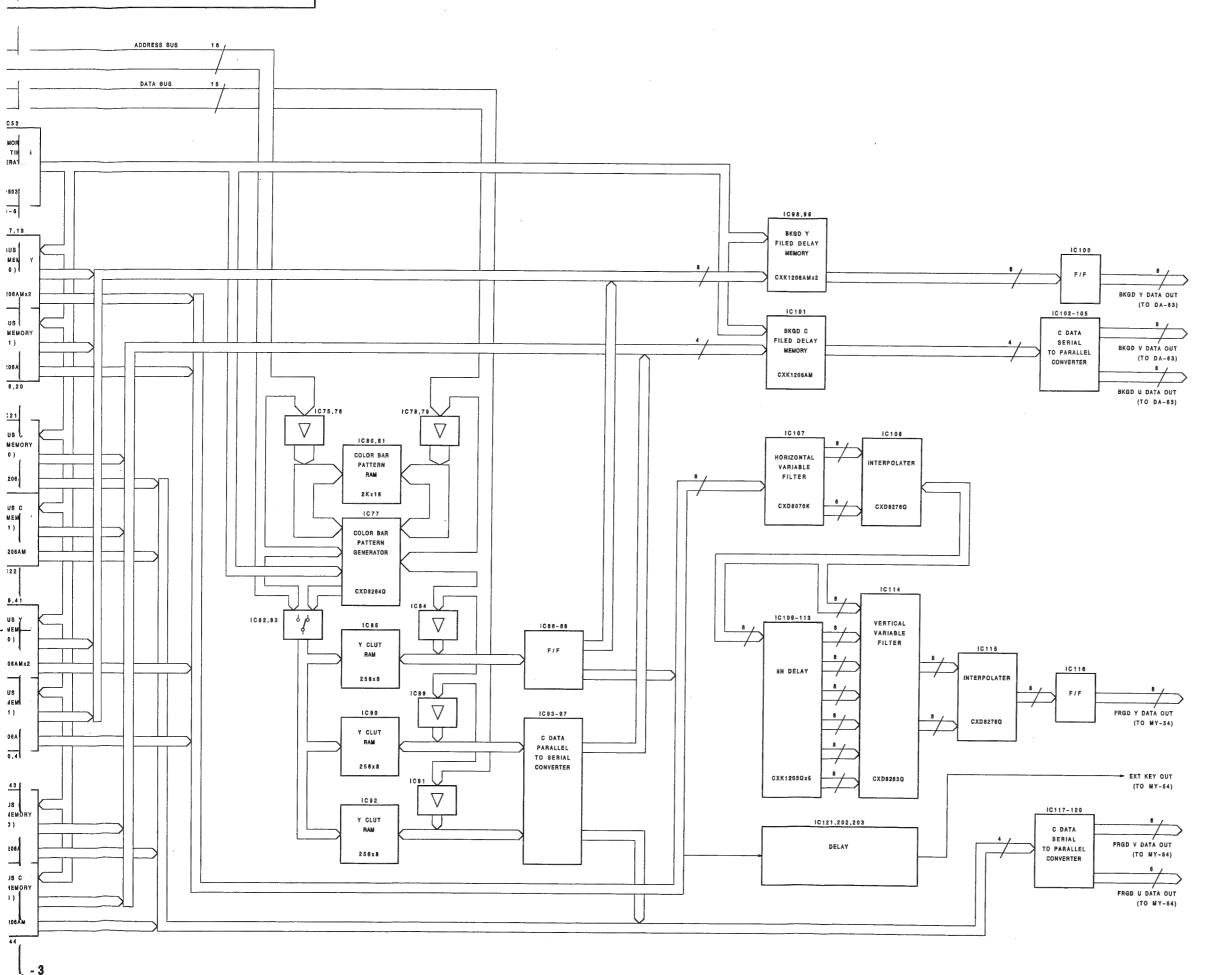
F SECT ONT OL EM SYNC

TO FM-29)

DIAGRAM

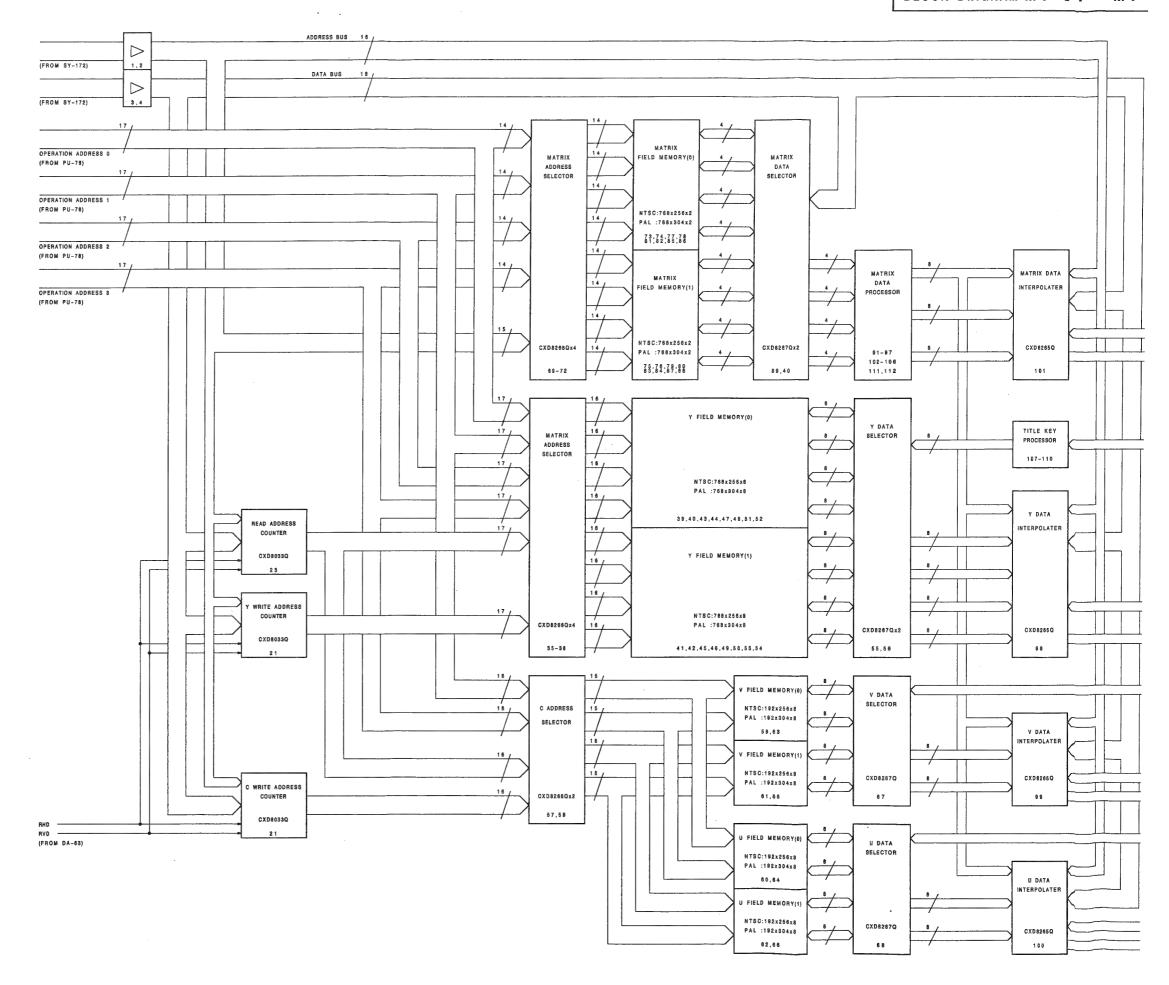
FM-29; Frame Synchronizer

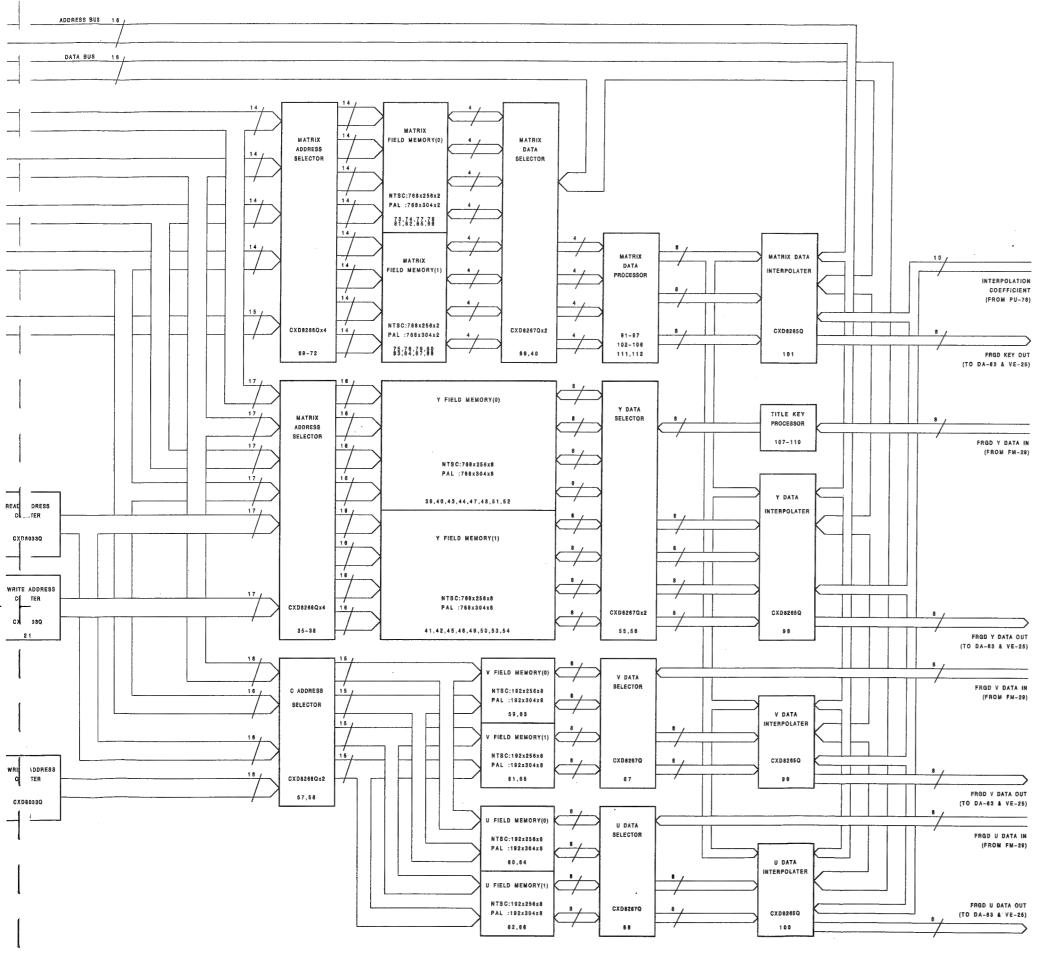




FM-29 BLOCK DIAGRAM DFS-500P

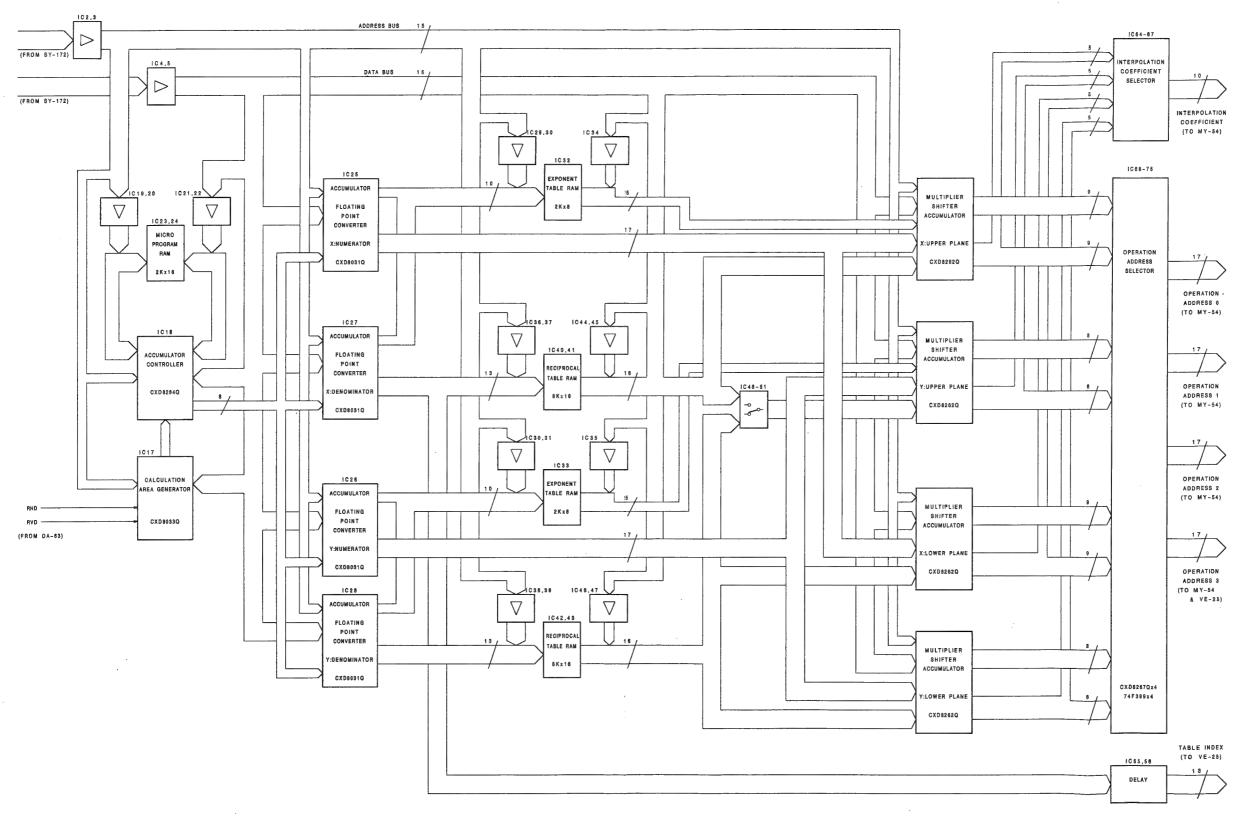
MY-54; Field Memory



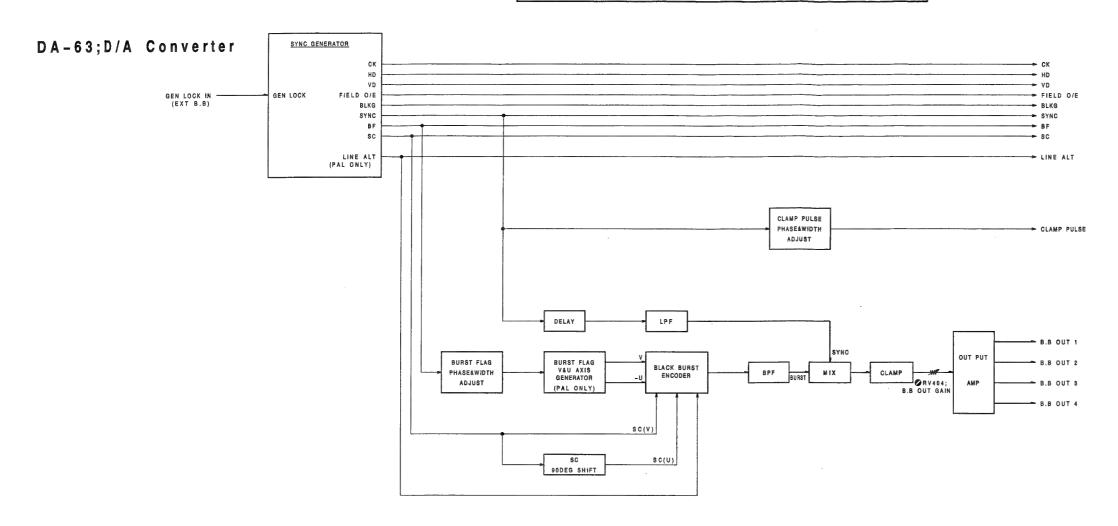


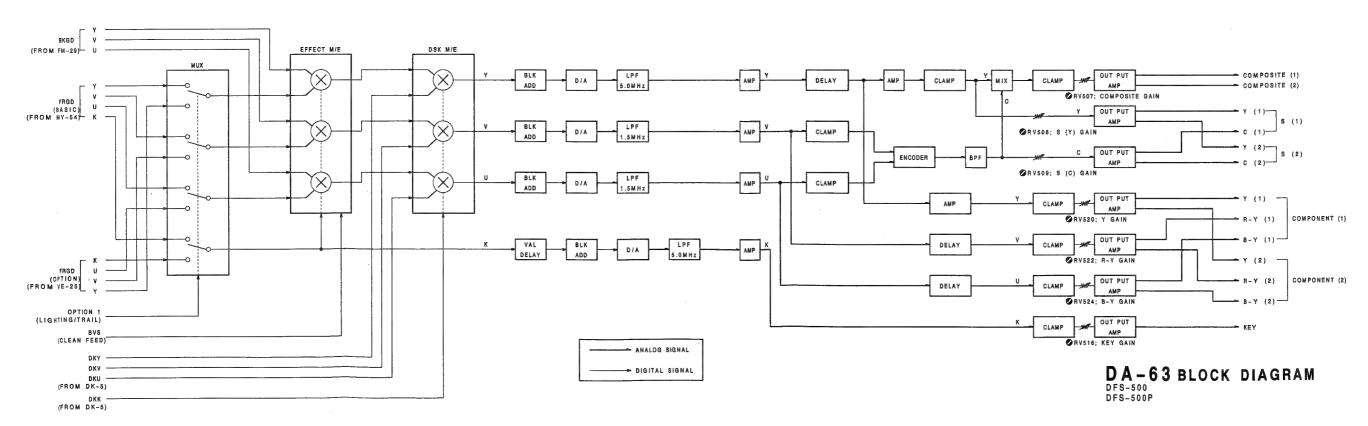
MY-54 BLOCK DIAGRAM DFS-500P

# PU-78; Address Operation

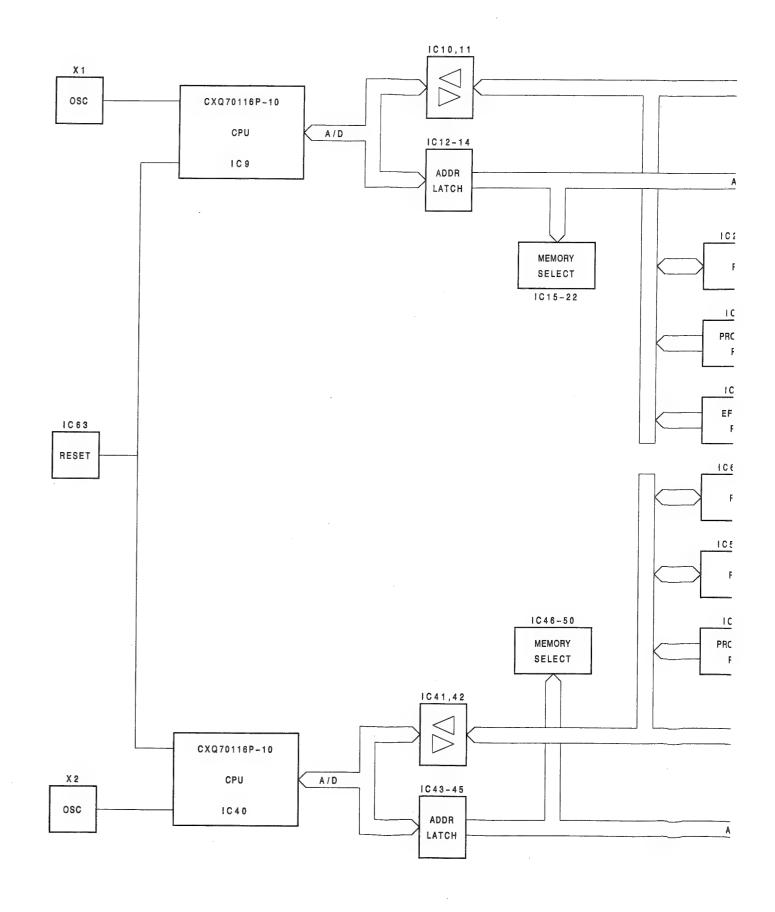


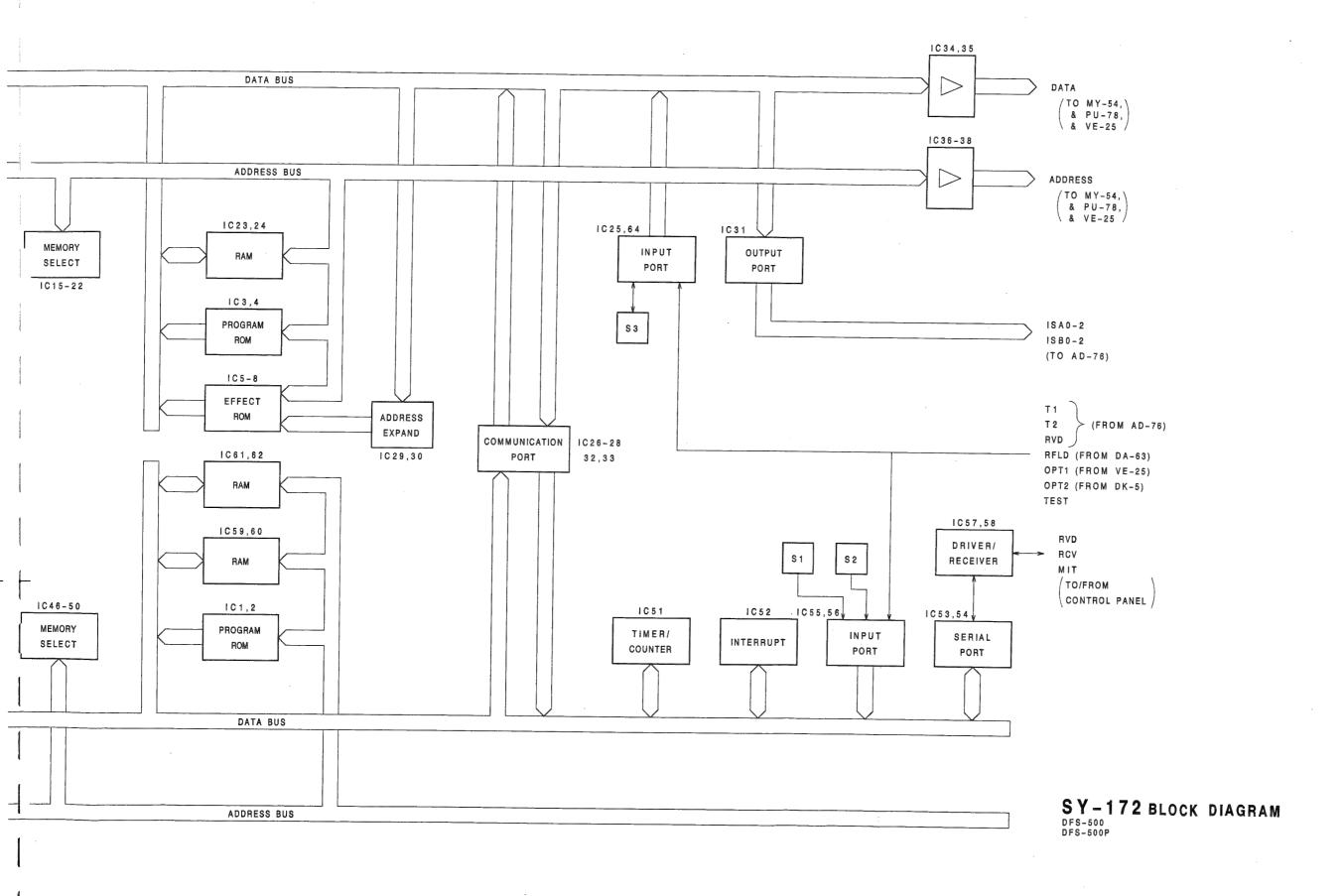
PU-78 BLOCK DIAGRAM DFS-500P



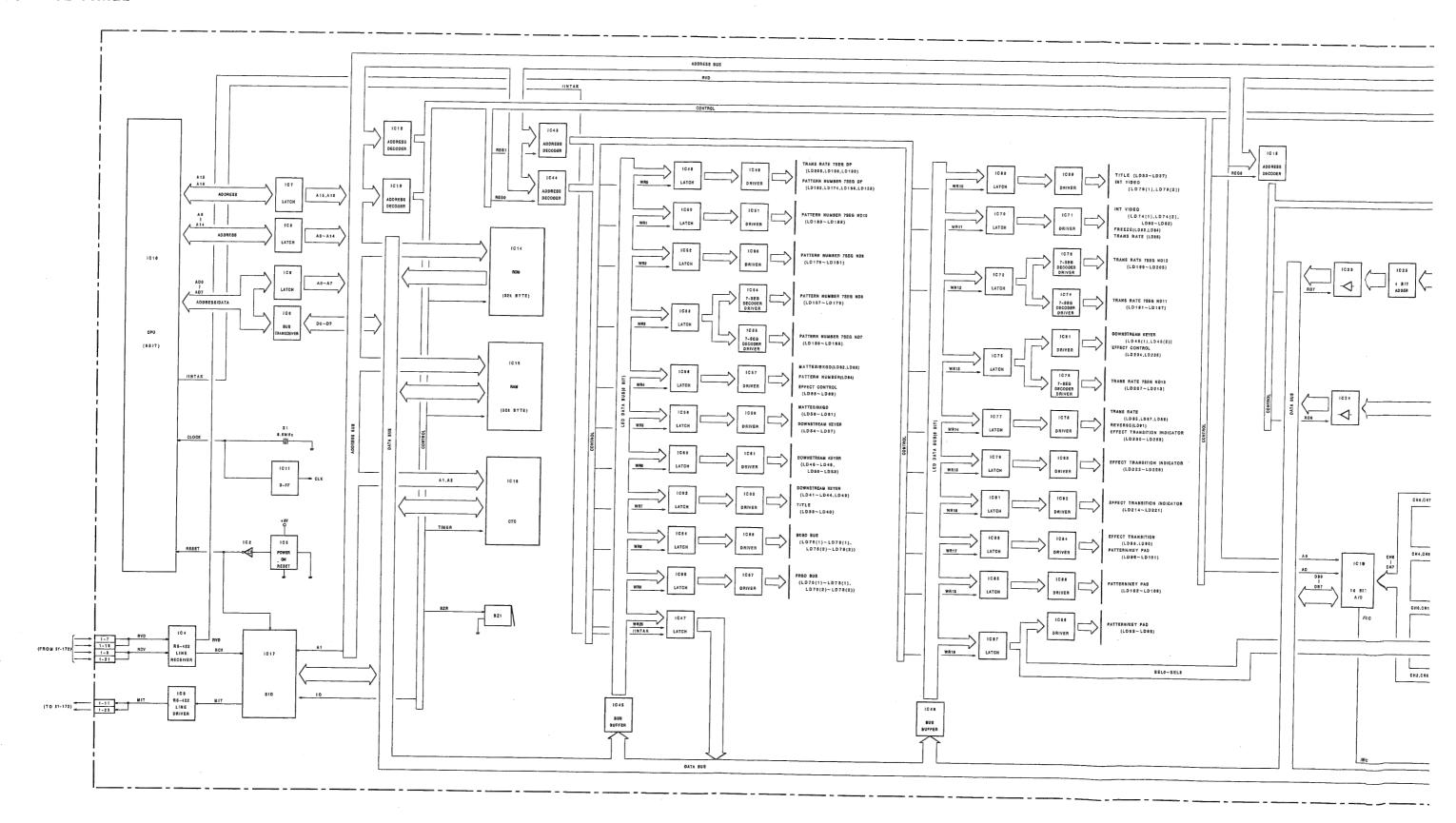


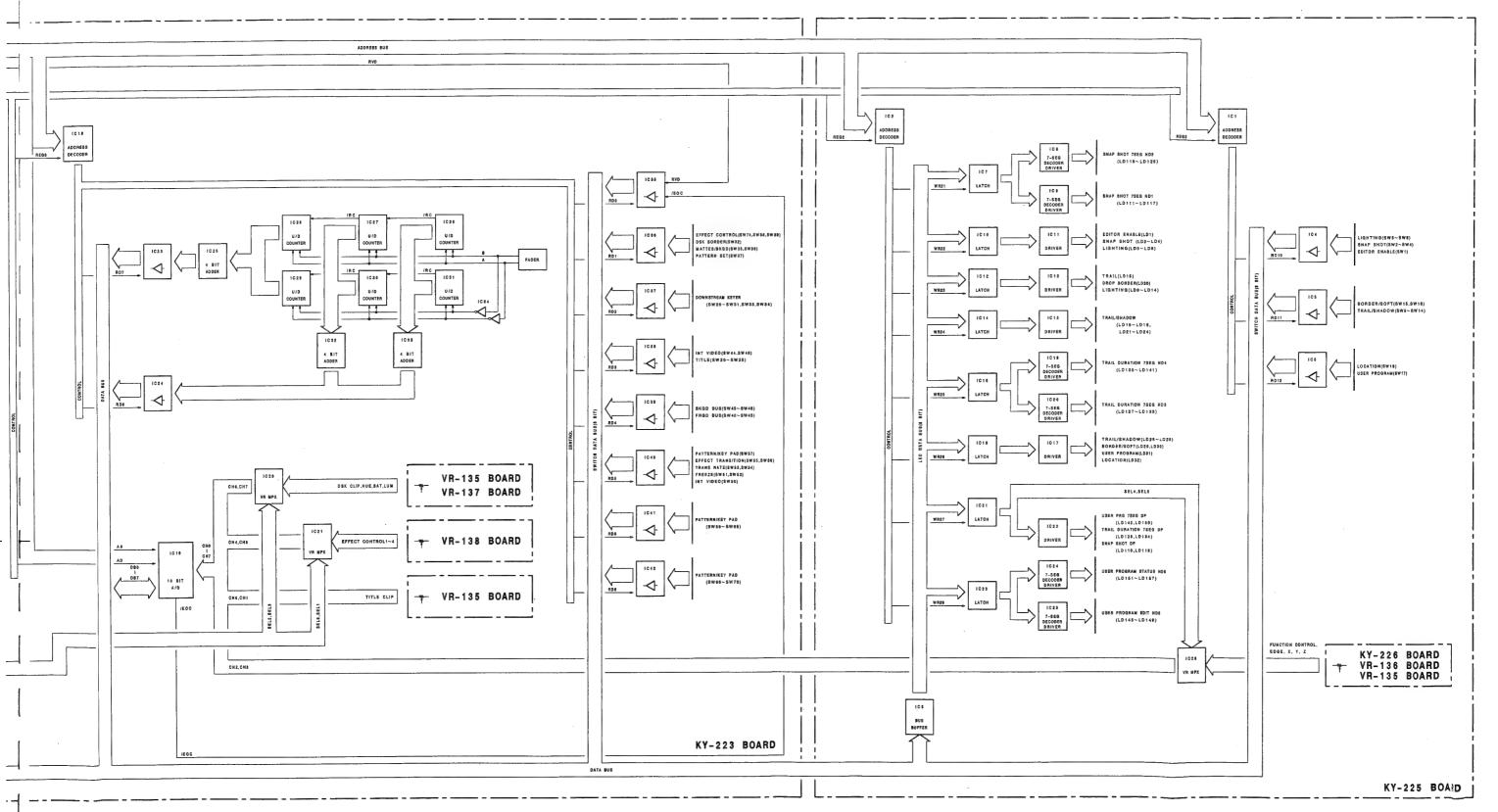
SY-172; System Control





# CONTROL PANEL





CONTROL PANEL BLOCK DIAGRAM
DFS-500P

# SECTION 5 SCHEMATIC DIAGRAMS

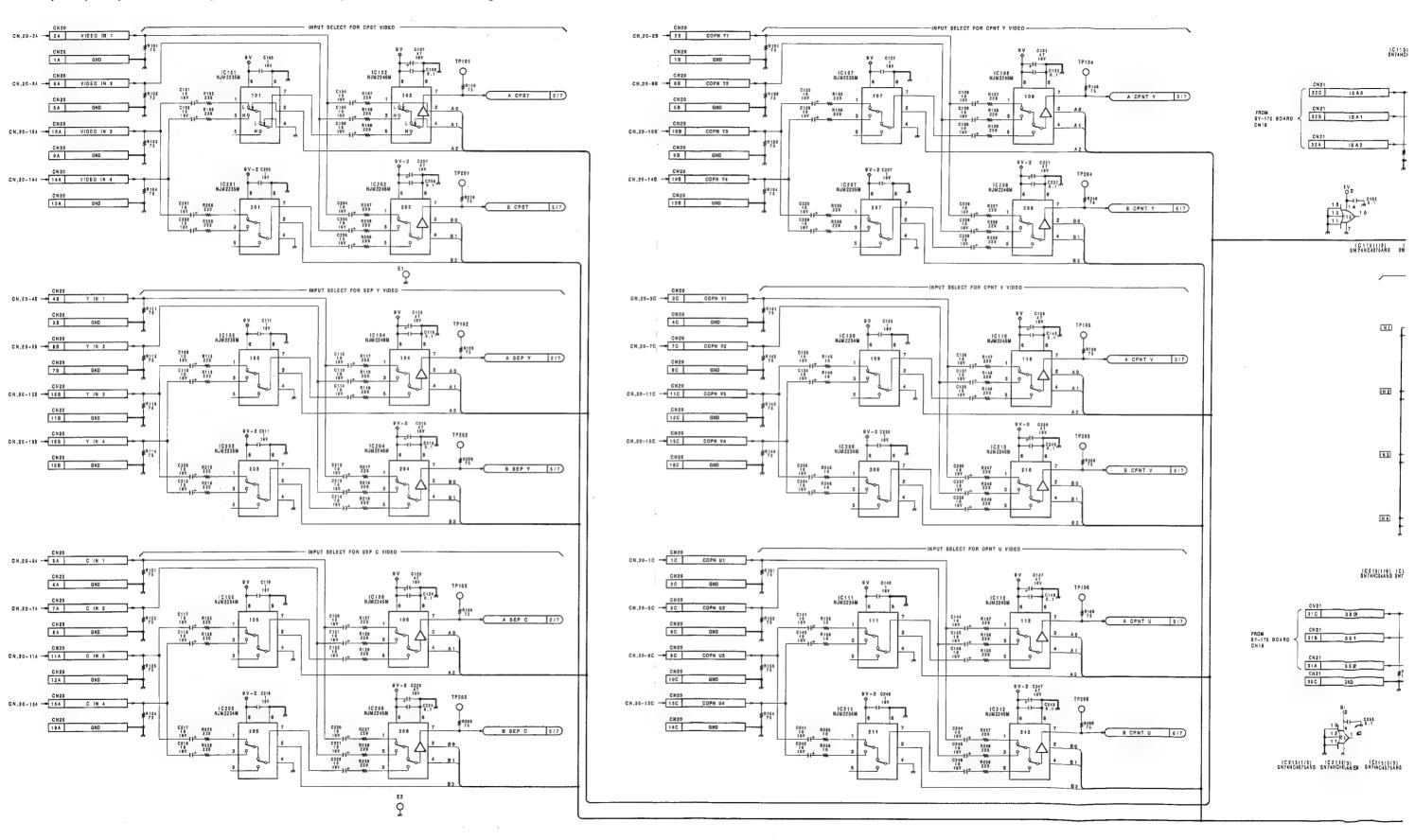
Board		Function	Page
AD-76(1	1 /7)	Input Crosspoint, Title Key Process, Voltage REG	5 - 3
AD-76(2	2/7)	A Y/C Separator & Clock Generator	
AD-76(3	3 / 7 )	A Chroma Decoder & A/D Converter	
AD-76(4	1/7)	A Write Clock Generator	
AD-76(5	5 / 7 )	B Y/C Separator & Clock Generator	
AD - 76(6	3 / 7 )	B Chroma Decoder & A/D Converter	5 – 13
AD-76(7	7 / 7 )	B Write Clock Generator	5 – 1 5
FM-29(1	1/6)	A Frame Memory & Write Controller	
FM-29(2	2/6)	B Frame Memory & Write Controller	5 – 19
FM-29(3	3 / 6 )	Control Register, Memory Read Controller	5 – 2 1
FM - 29 (4	4/6)	Internal Video Signal Generator	
FM - 29 (8	5 / 6 )	BKGD Bus Field Delay Memory	
FM-29(6	3 / 6 )	FRGD Bus Digital Lowpass Filter	5 – 27
M Y - 54 (	1/3)	Control Register, Address Counter, Title Key Process	5 - 29
MY-54(	2 / 3 )	Video Effect Memory	
M Y - 54(	3 / 3 )	Matrix Memory, Interpolater	5 - 3 3
PU-78(1	1/3)	Control Register, Front-End Address Calculator	
PU-78(2	2/3)	Look Up Table Memory	
PU-78(3	3 / 3 )	Back-End Address Calculator	5 - 39
DA-63(1	1 /5)	SYNC Generator	
DA-63(2	2 / 5 )	Digital M/E & D/A Converter	
DA-63(3	3 / 5 )	PGM Out (Composite, S) Processor & B.B Generator	5 – 4 5
DA-63(4	4 / 5 )	PGM Out (Component) & Key Out PRO ······	
DA-63(	5 / 5 )	Address & Data Bus Driver	5 – 4 9
SY-172	(1/2)	Effect CPU ·····	5 - 5 1
SY-172	•	Main CPU	
CN-573		Connector Board ·····	5 - 5 5
MB-385		Mother Board ····	5 - 5 7
KY-223	(1/3)	CPU	
KY-223		LED Driver	
KY-223	(3/3)	LED & Switch	5-63
KY-225	(1/2)	LED Driver	
K Y - 2 2 5	(2/2)	LED & Switch	5 - 67
FRAME	WIRING(1/3)	Process Unit	
FRAME	WIRING(2/3)	Process Unit	
FRAME	WIRING (3/3)	Control Panel·····	5-73

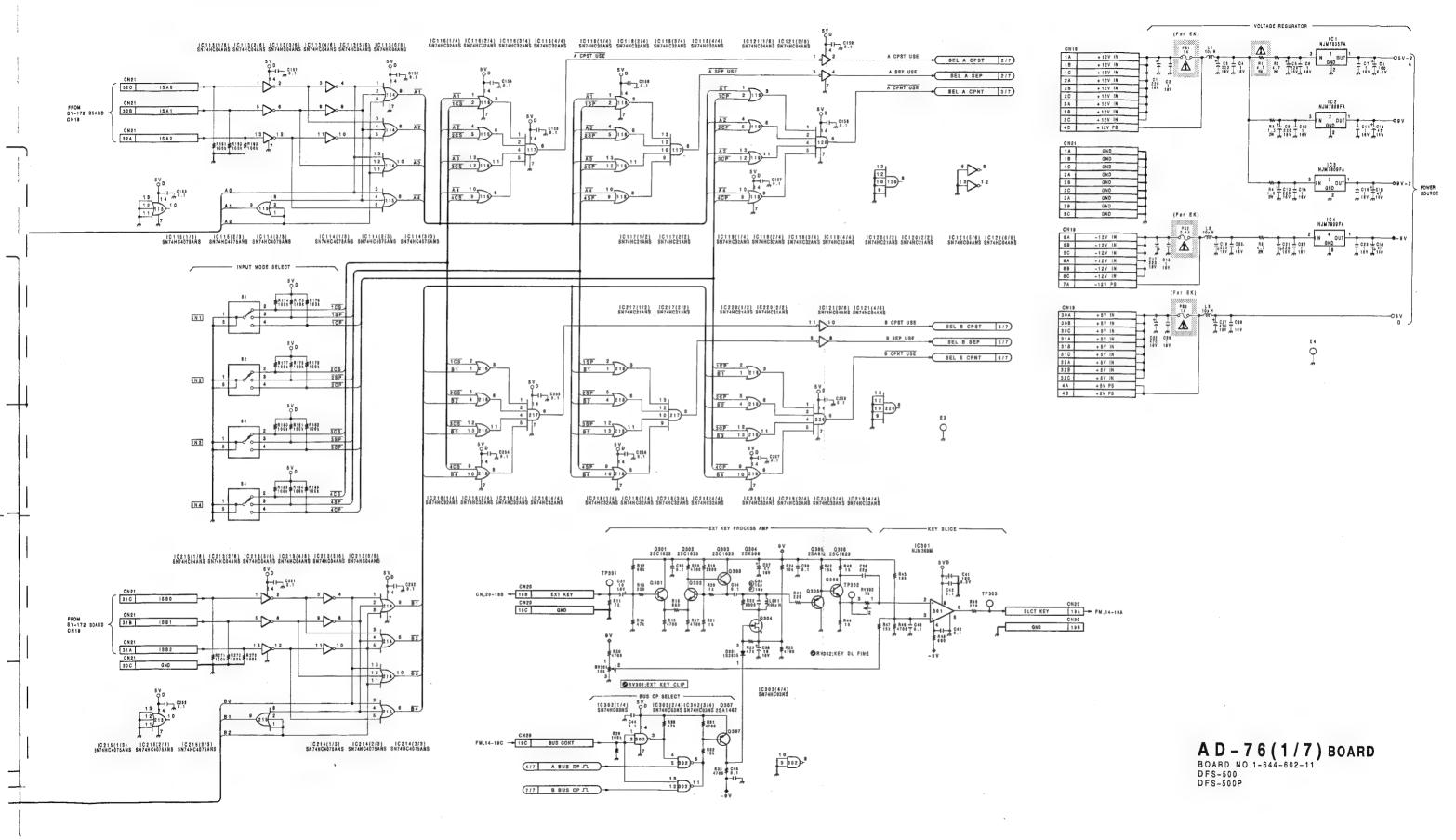
注意1;▲ 印のついた部品は安全性を維持するために重要な部品です。 後って交換する時は必ず指定の部品を使って下さい。

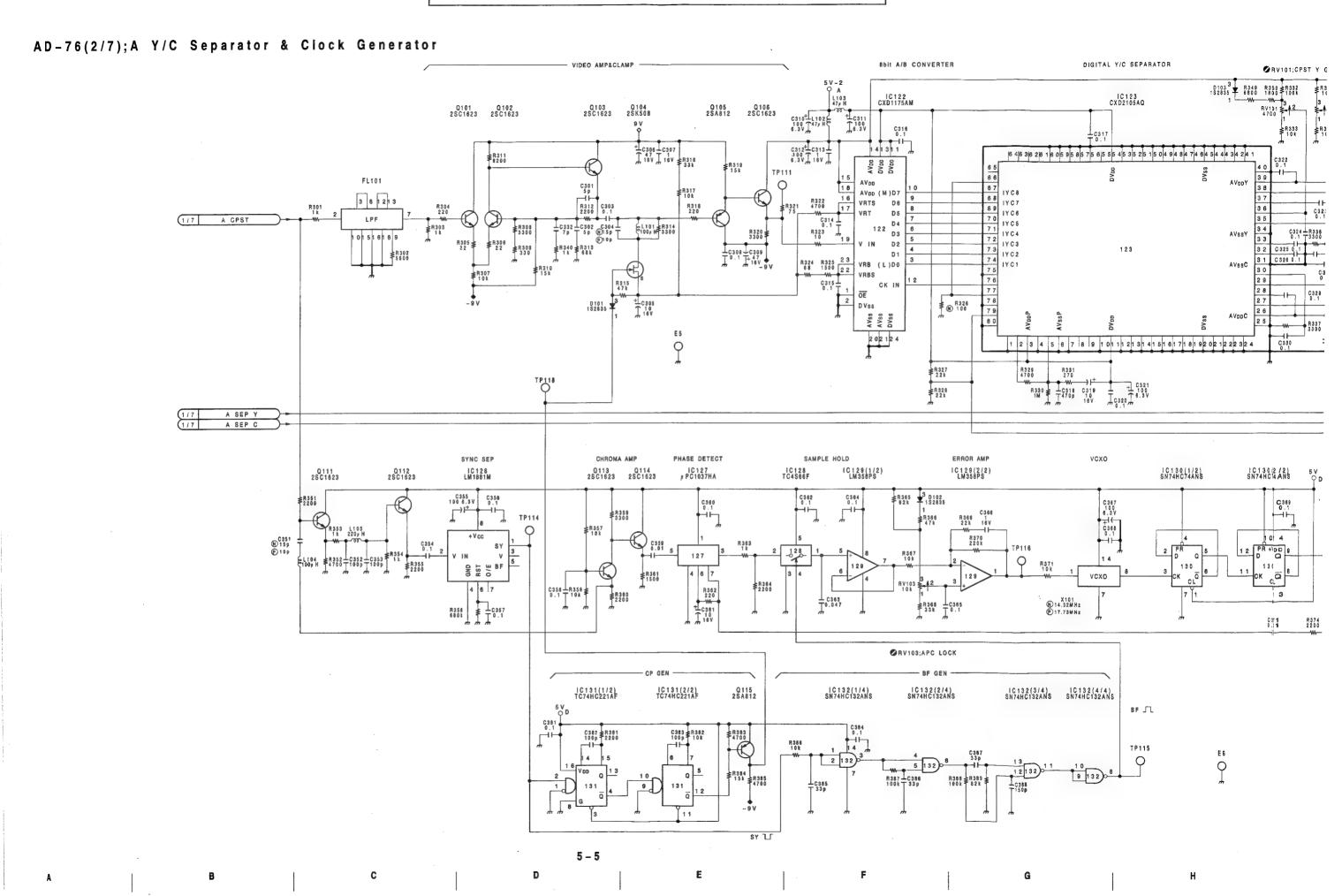
#### NOTE:

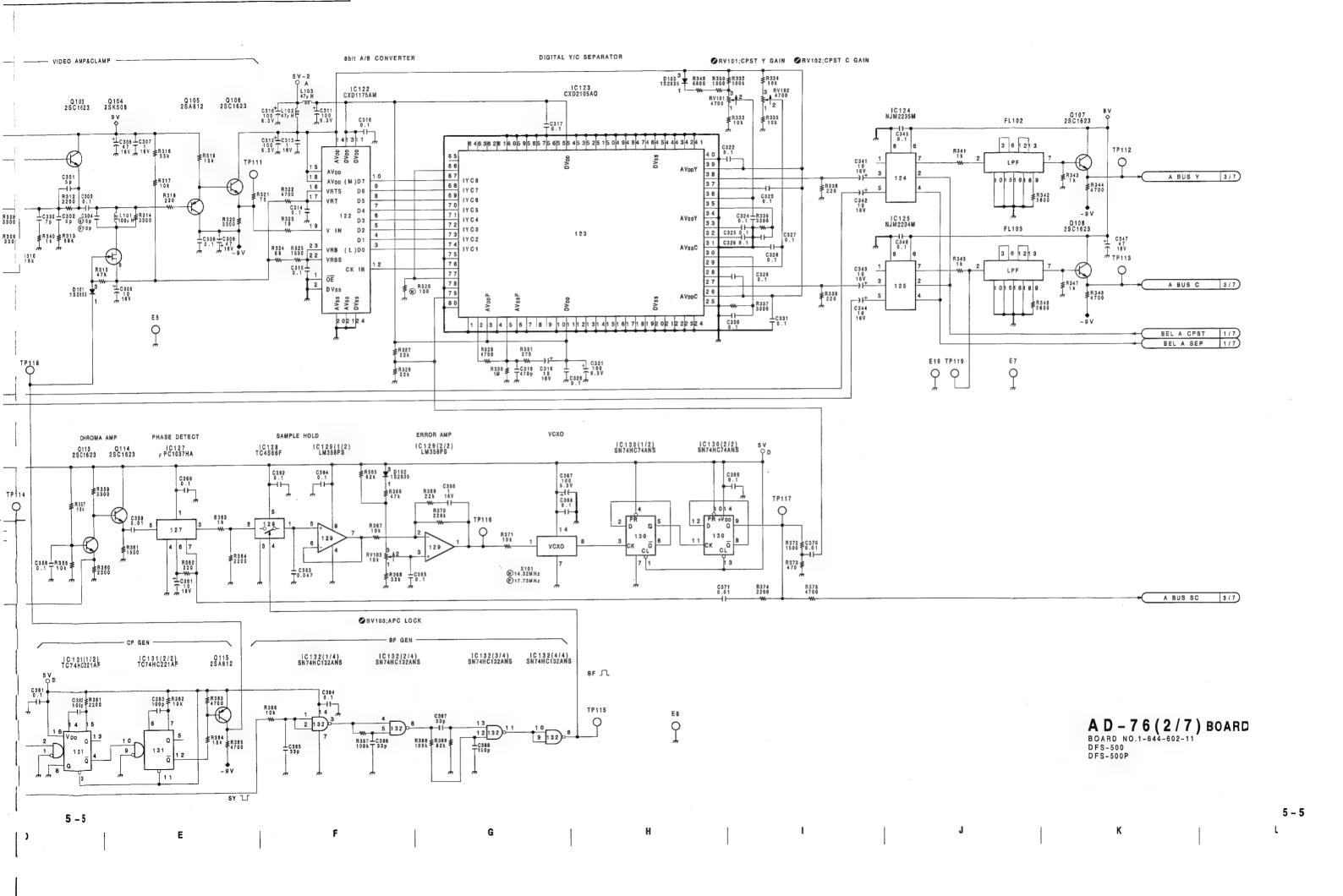
The  $\underline{\mathbb{A}}$  -marked components are critical to sefety. Replace only with same components as specified.

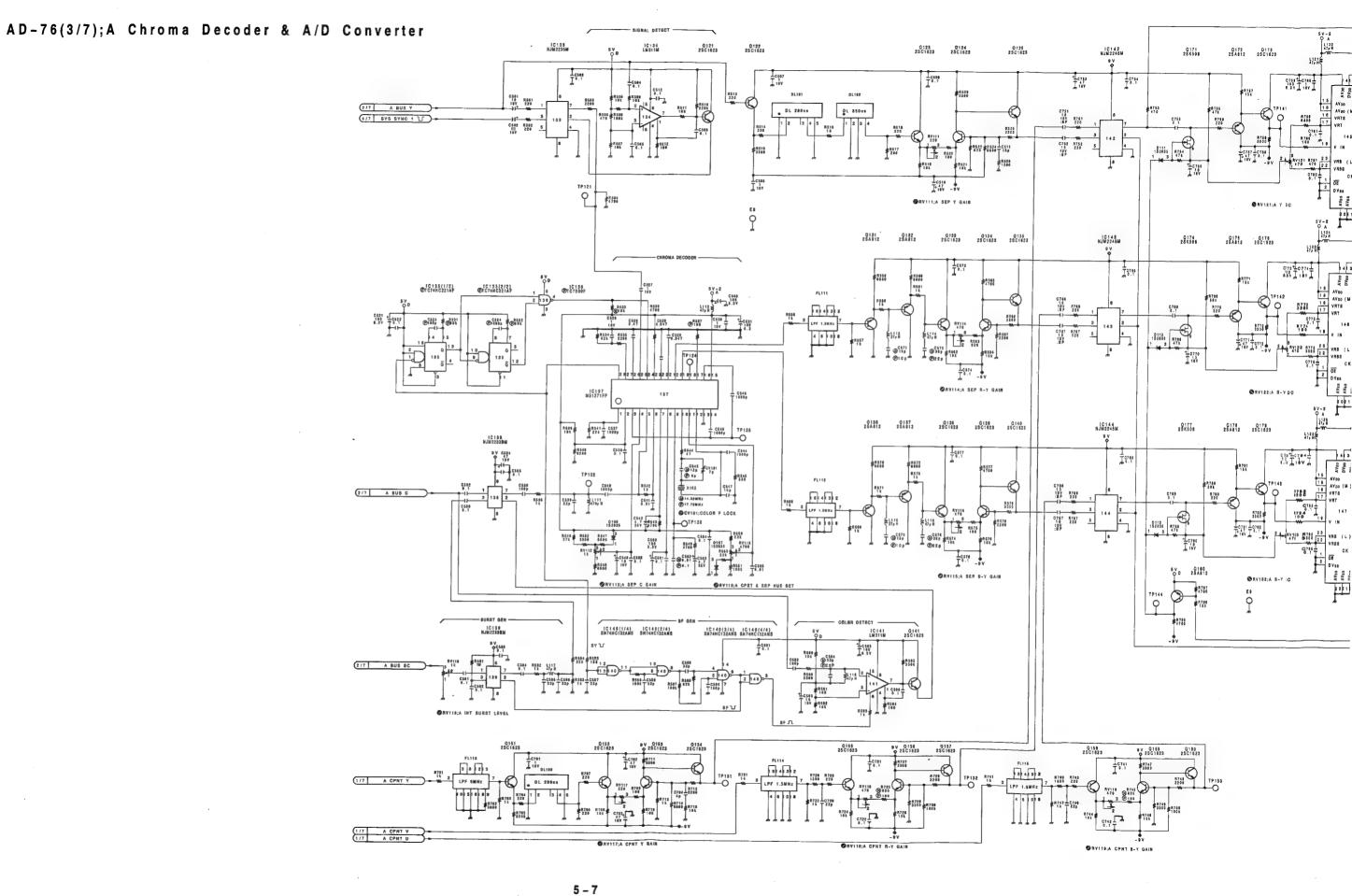
# AD-76(1/7); Input Crosspoint, Title Key Process, Voltage REG.

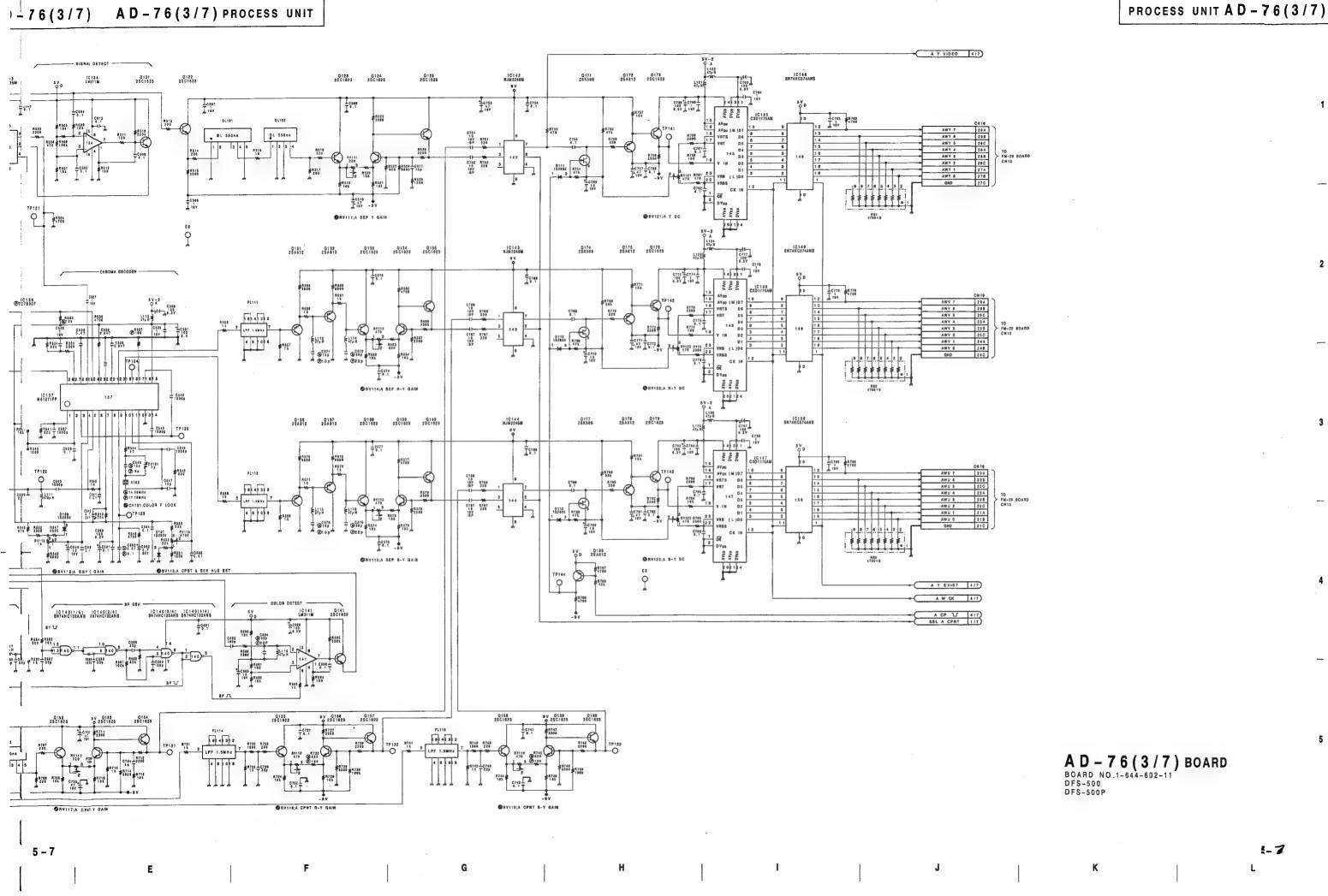


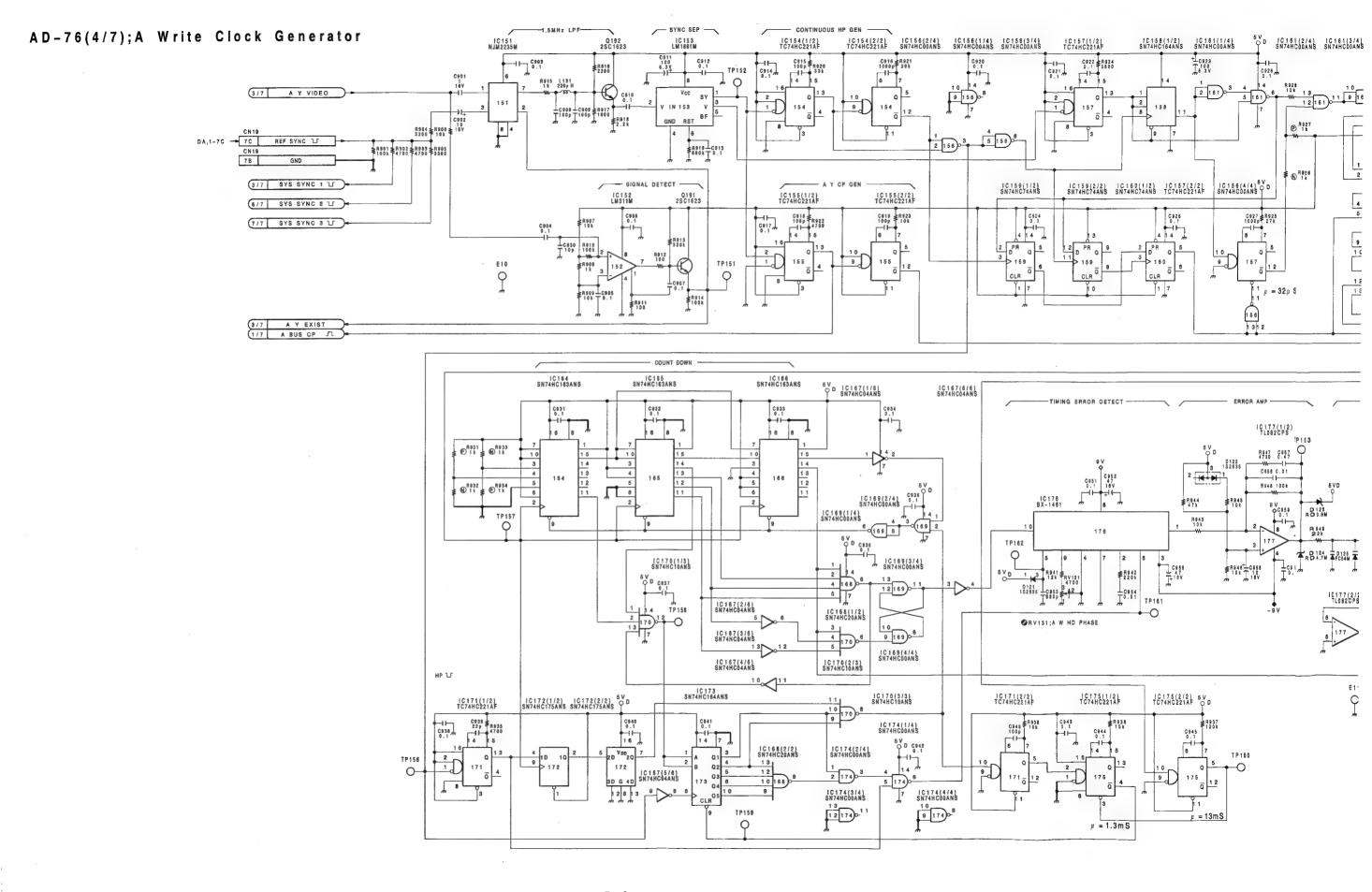












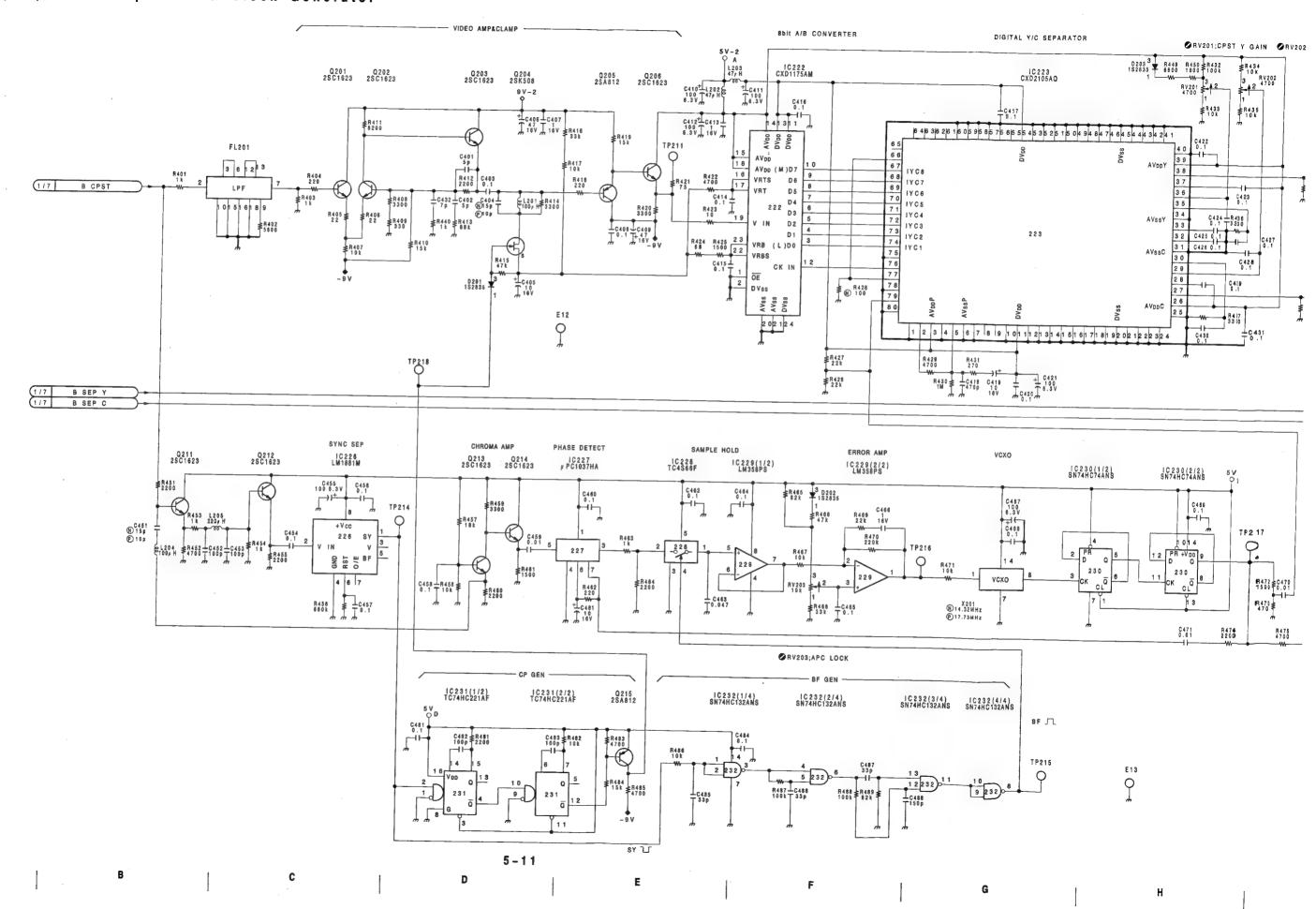
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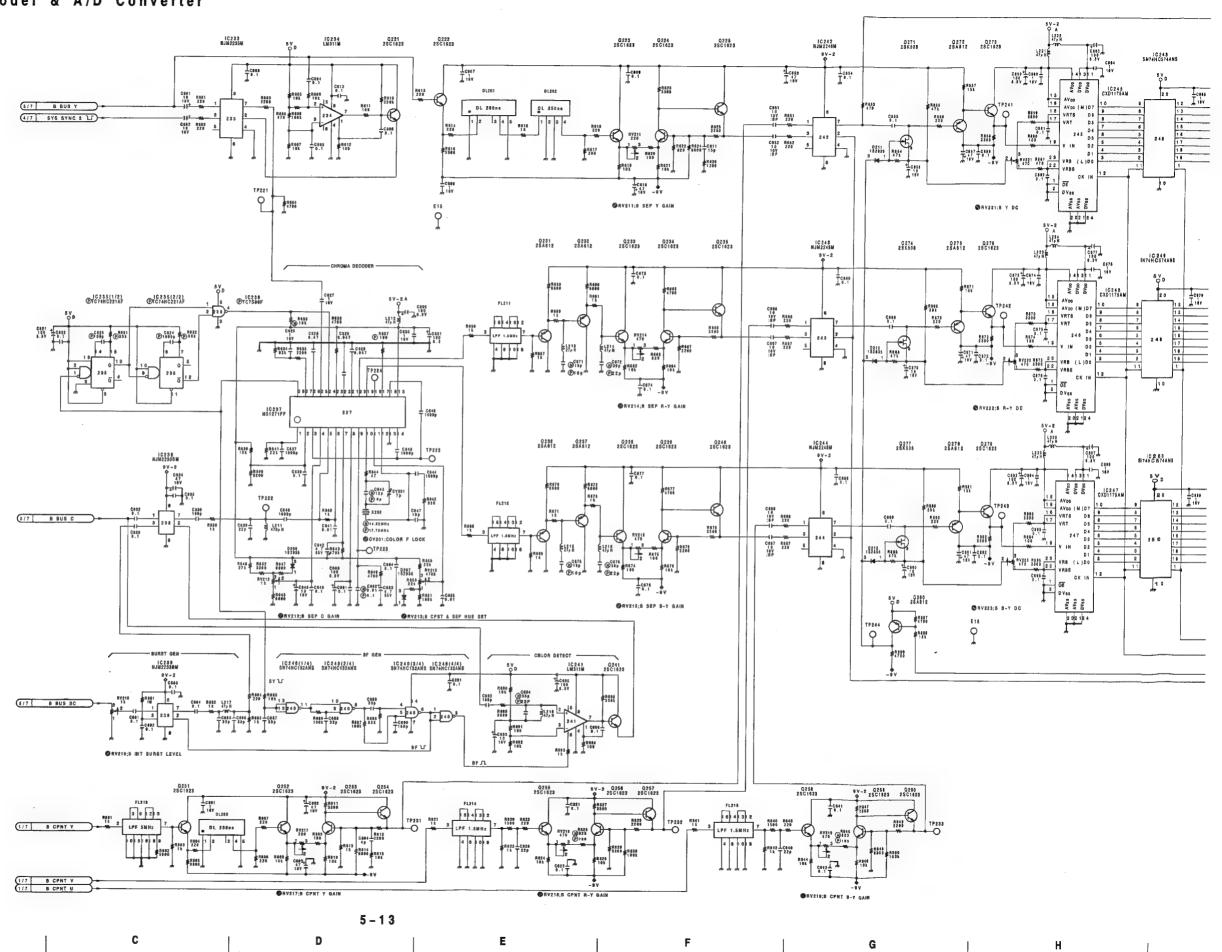
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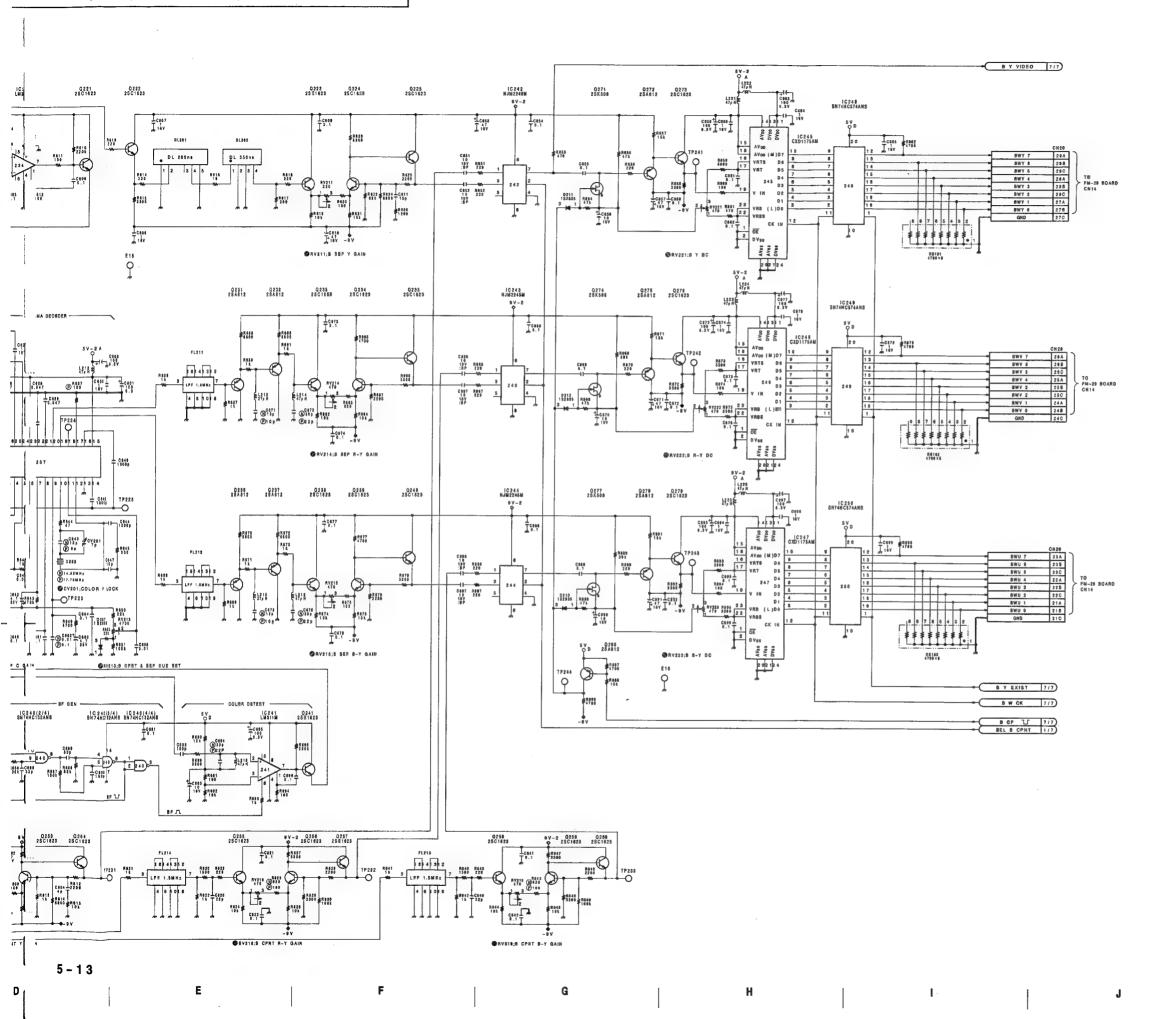
# AD-76(5/7); B Y/C Separator & Clock Generator



 $)_{T}76(5/7)$  AD-76(5/7) PROCESS UNIT

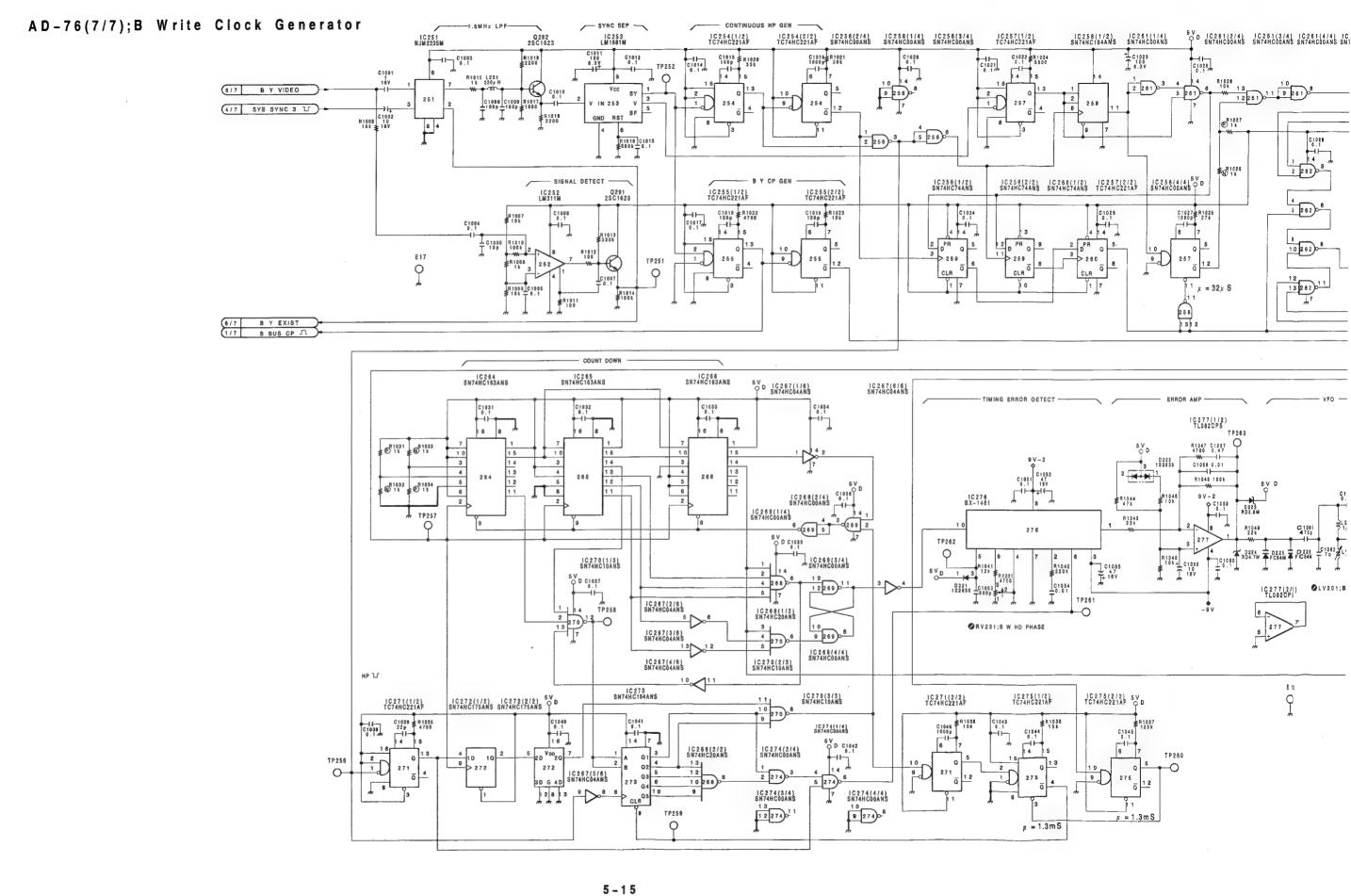
# AD-76(6/7); B Chroma Decoder & A/D Converter



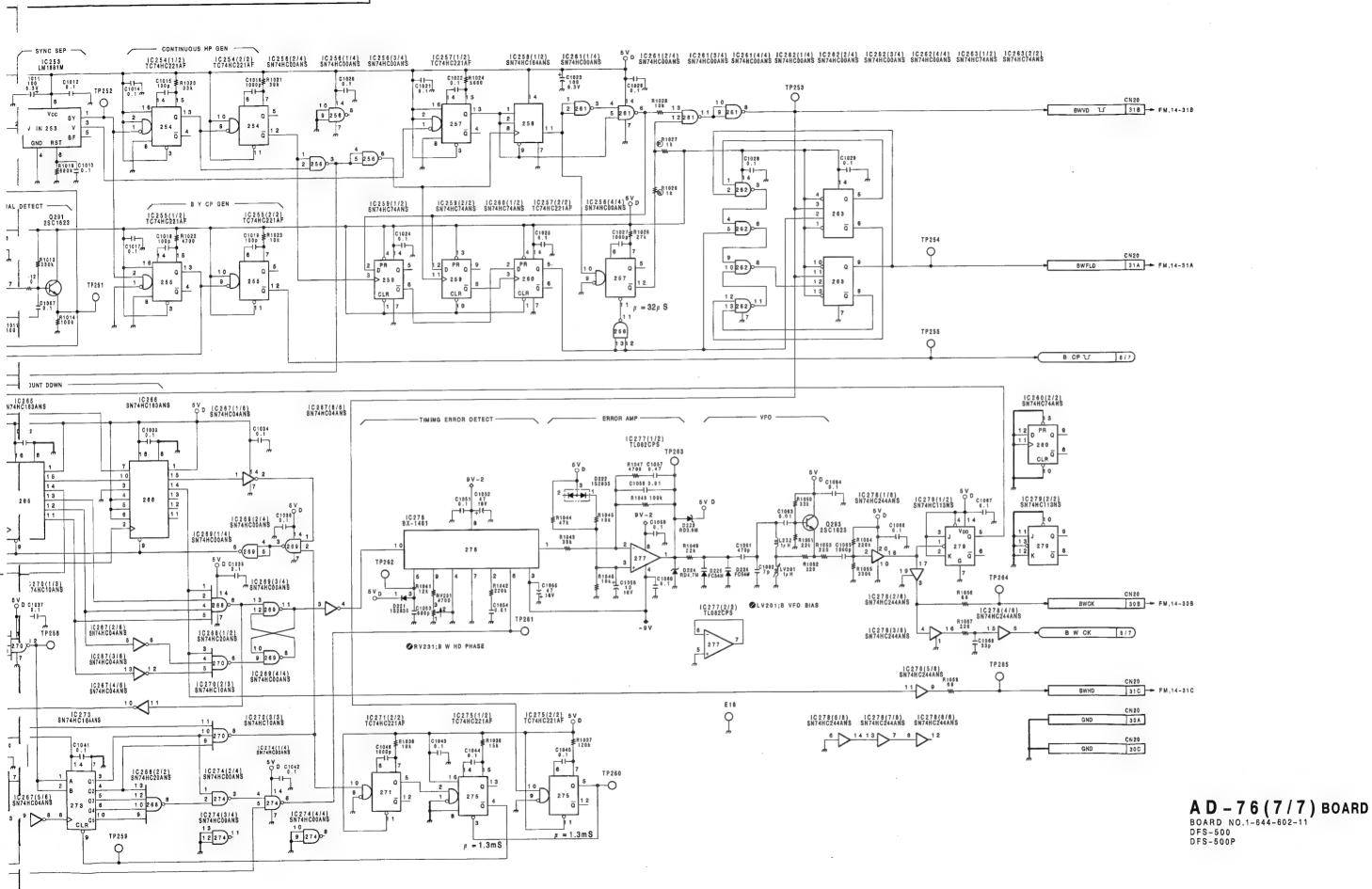


A D - 76 (6/7) BOARD
BOARD NO.1-644-602-11
DFS-500
DFS-500P

5-13

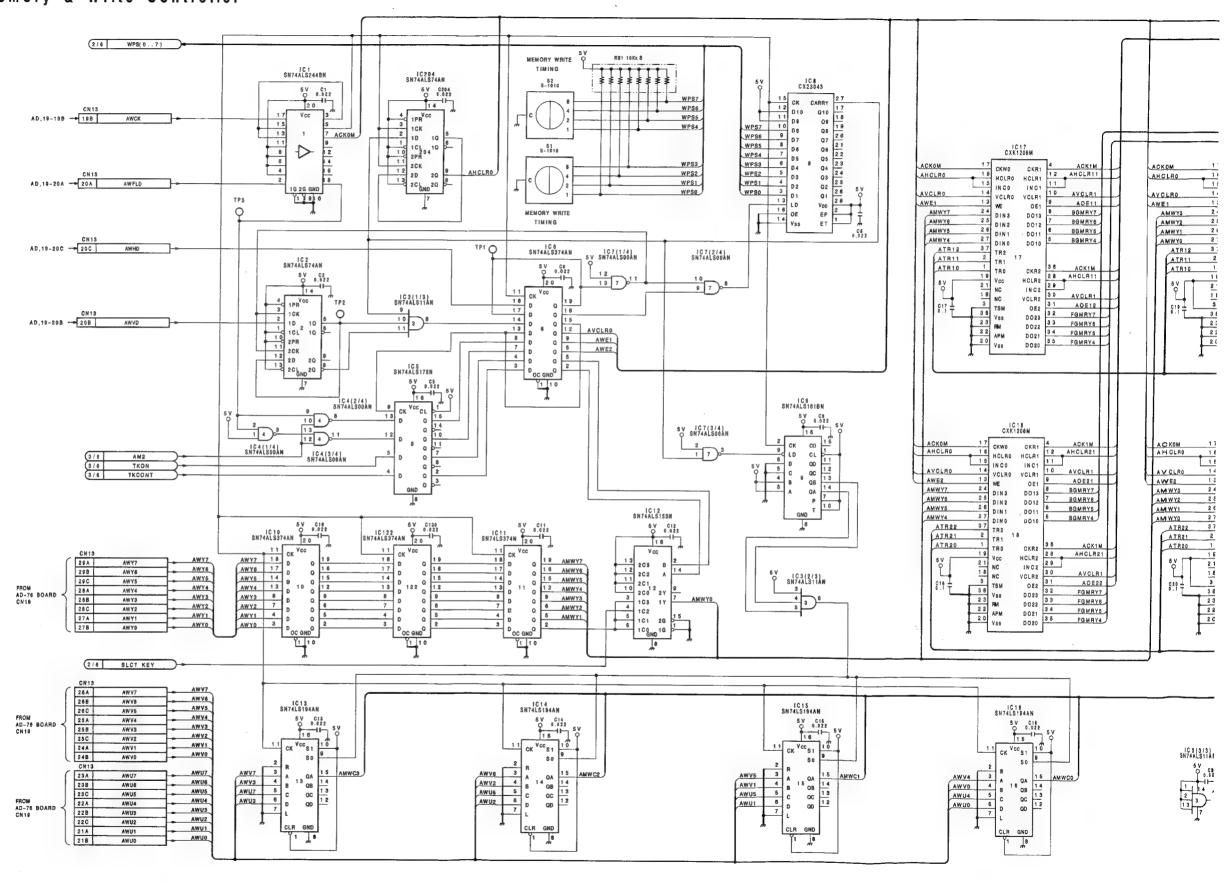


5 - 15



5-15

FM-29(1/6); A Frame Memory & Write Controller

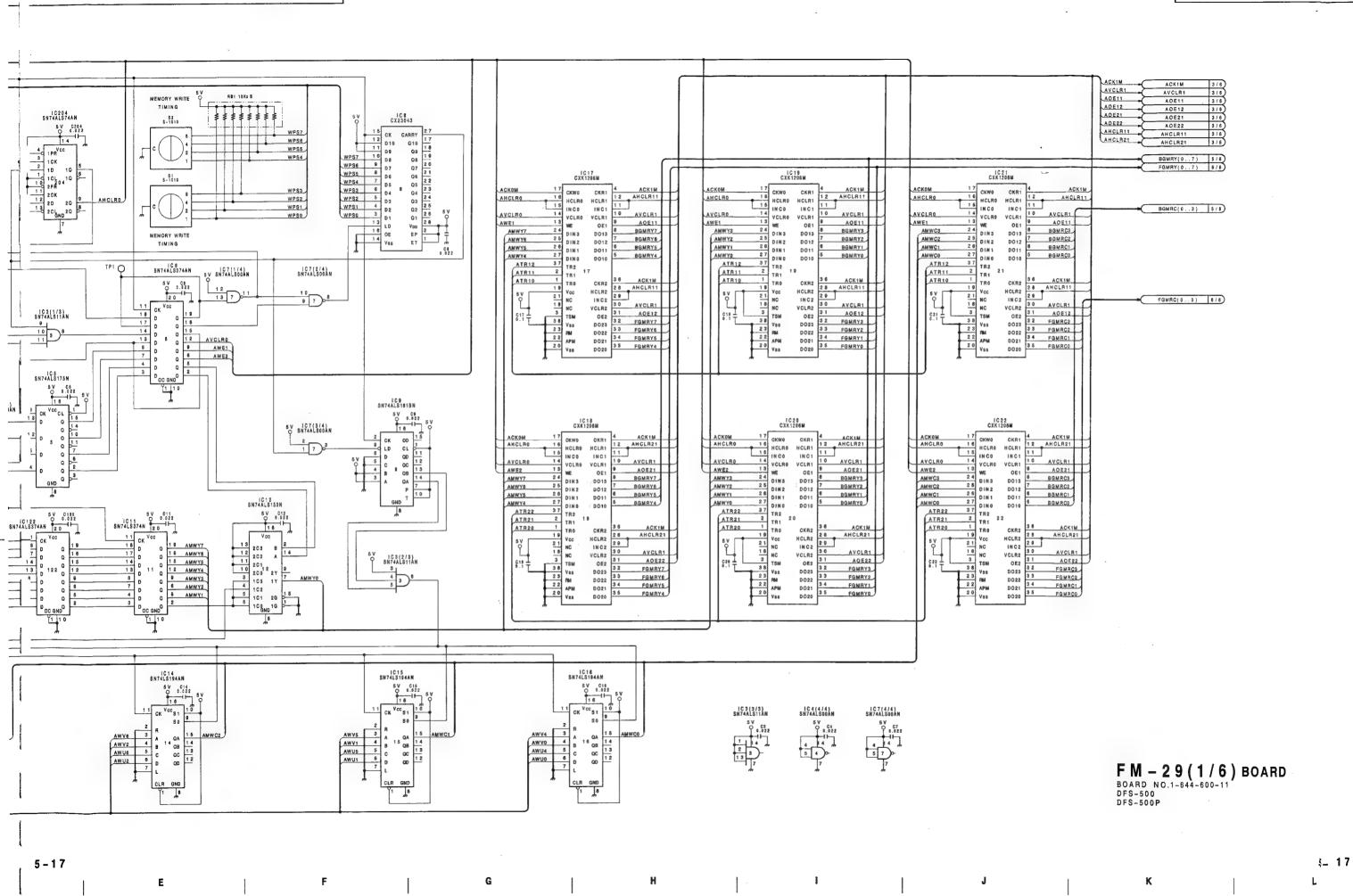


5 – 17

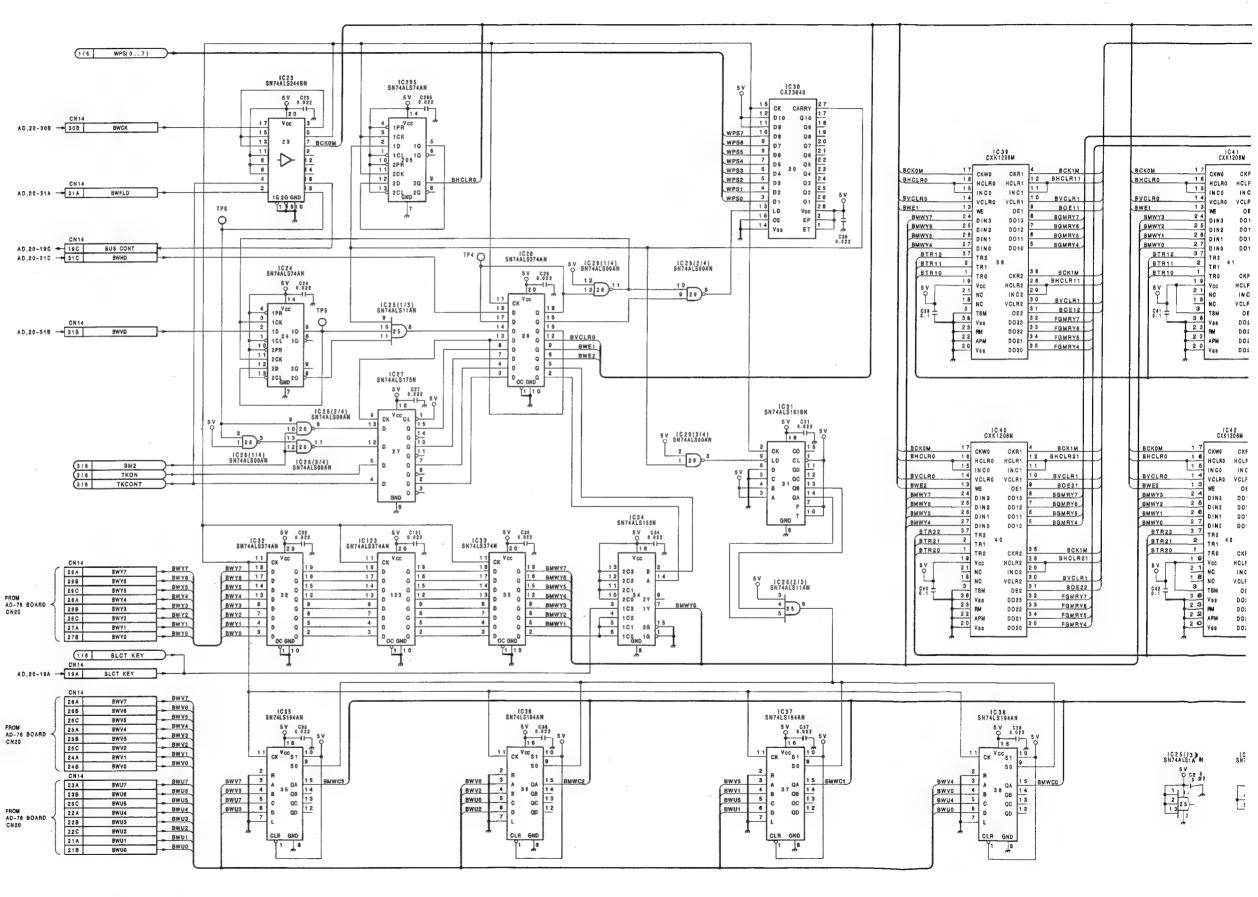
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# FM-29(2/6); B Frame Memory & Write Controller



5 – 19

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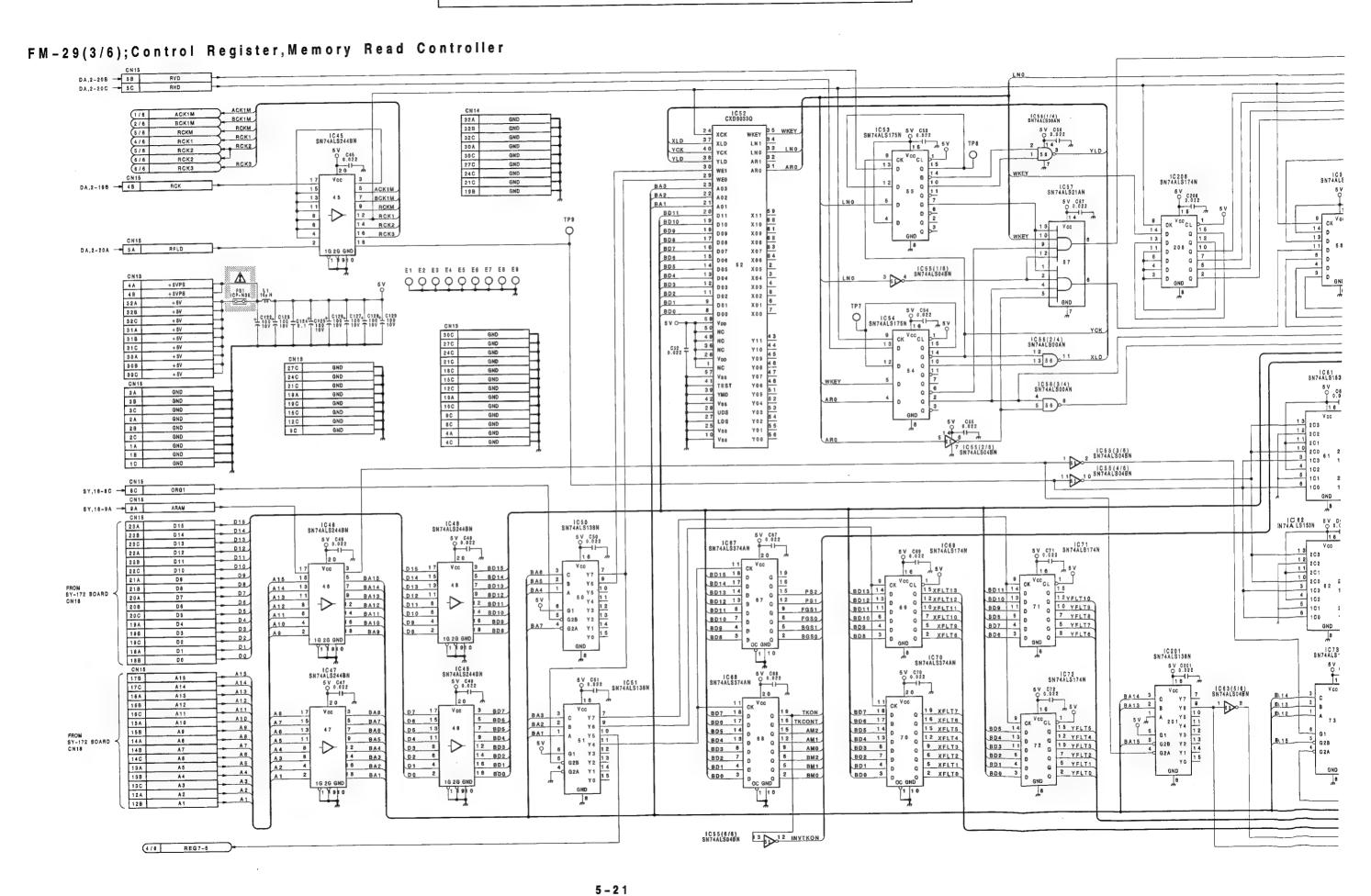
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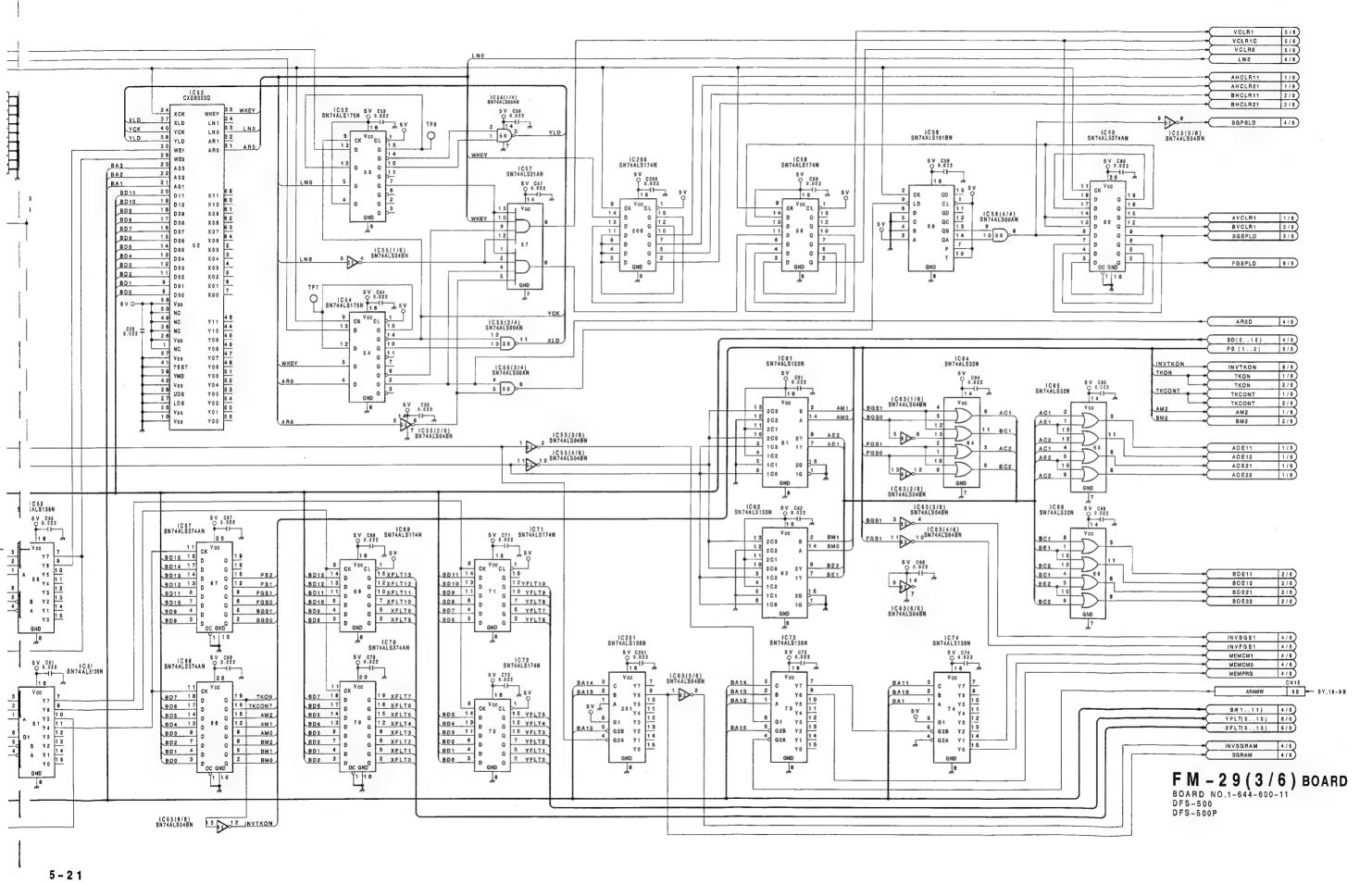
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FM-29(2/6) FM-29(2/6) PROCESS UNIT



D |



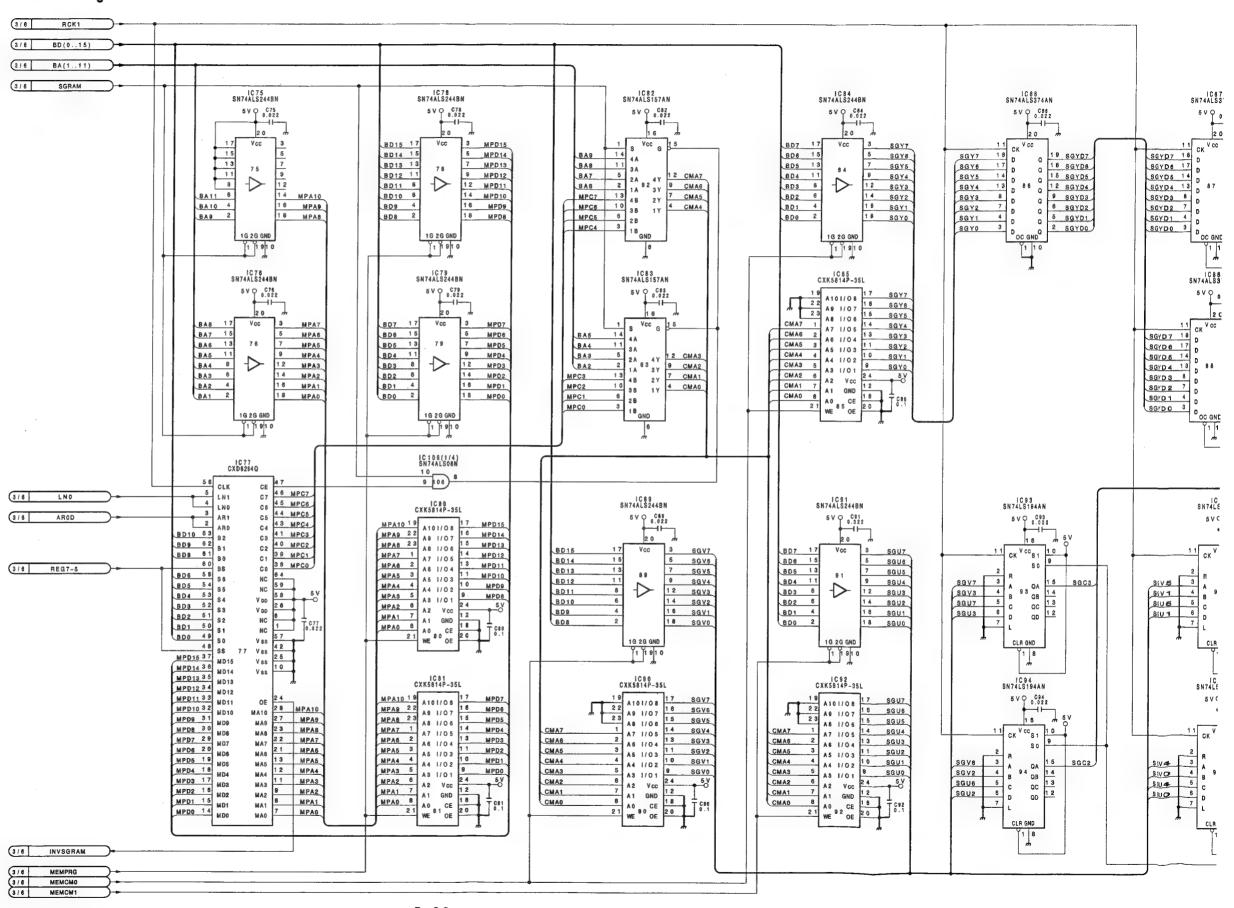
5-21

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### FM-29(4/6);Internal Video Signal Generator

В

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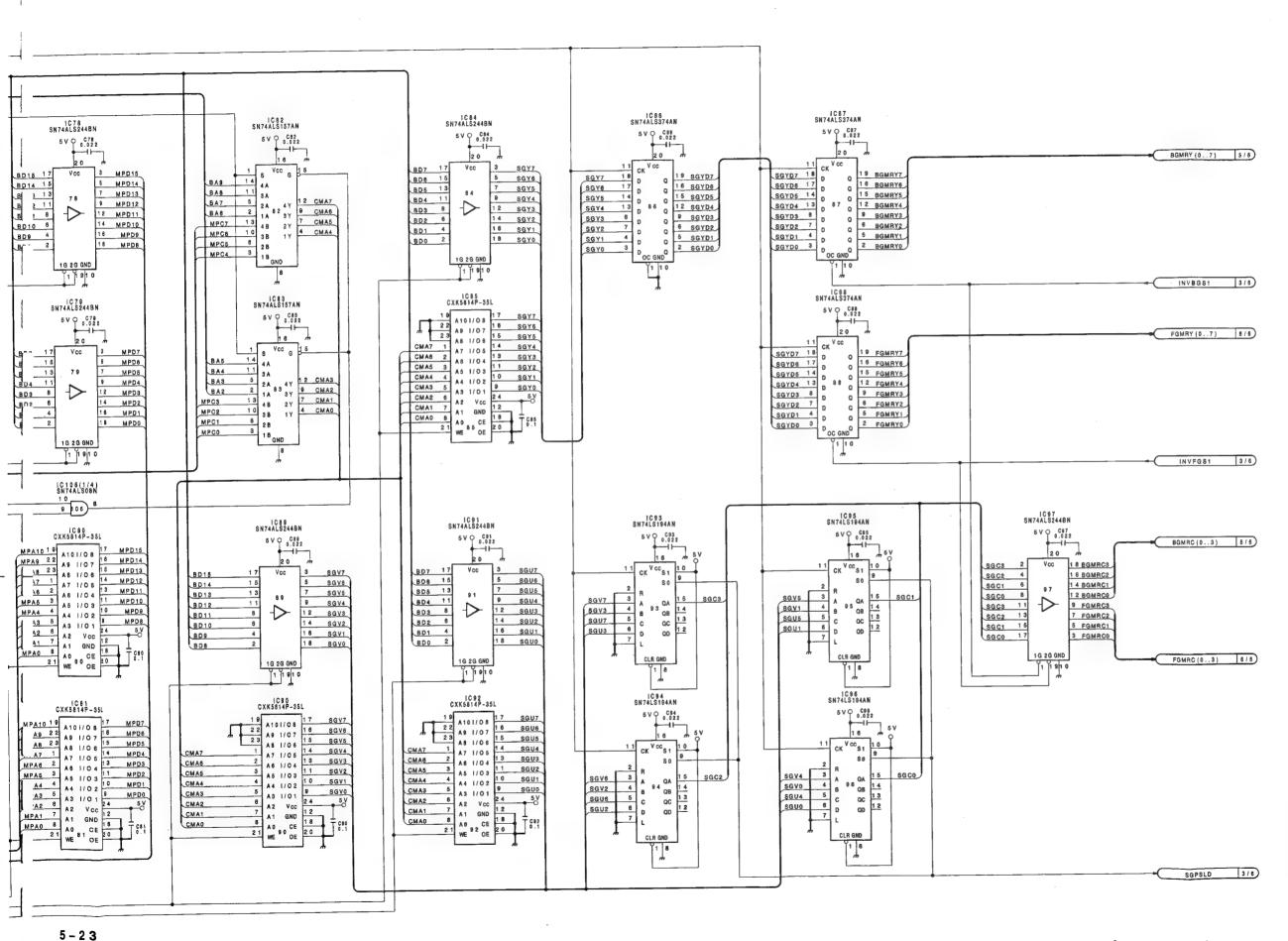
5 - 23

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FM - 29 (4/6) BOAR D
BOARD NO.1-644-600-11
DFS-500
DFS-500P

5 - 23

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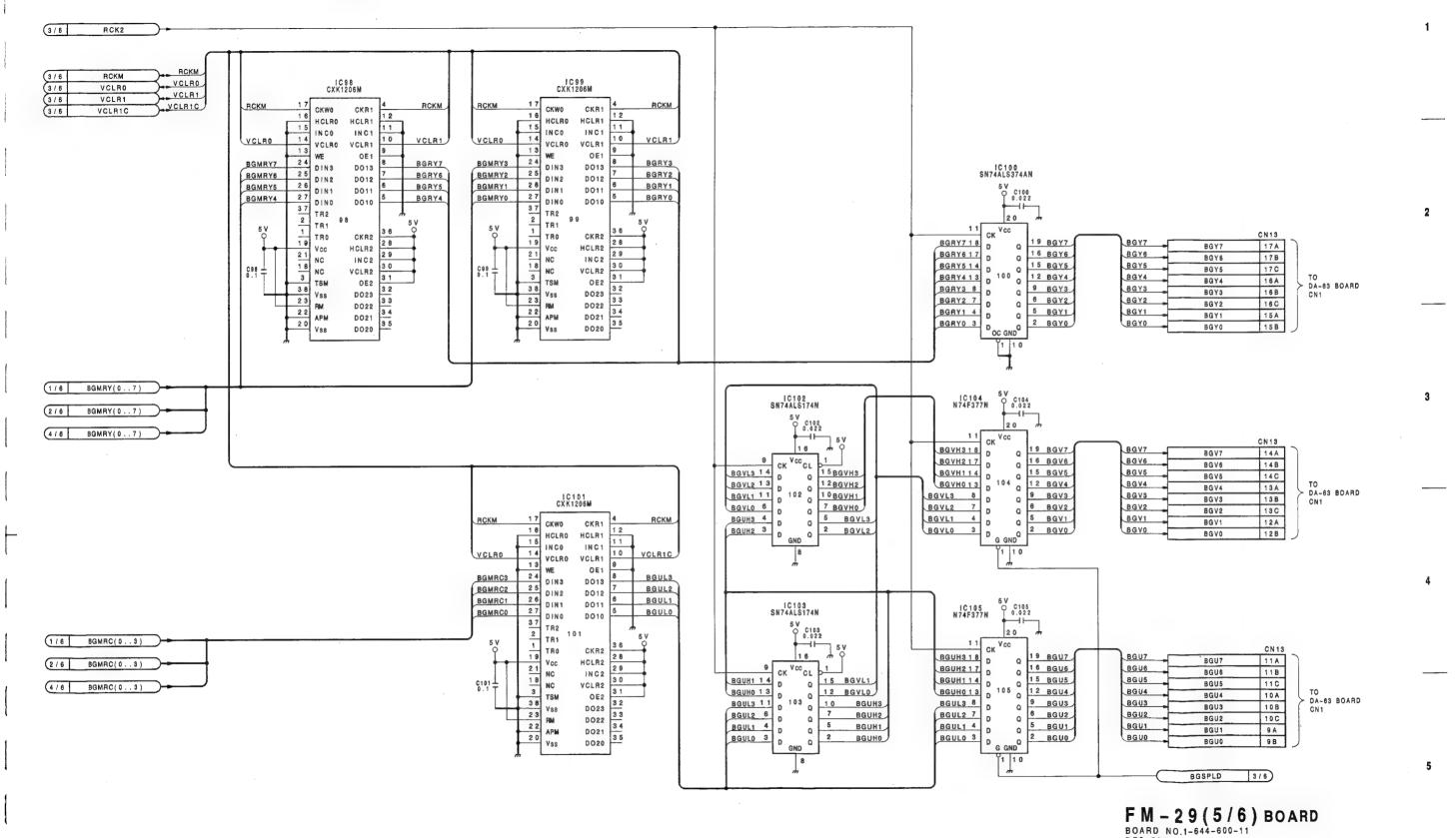
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### FM-29(5/6); BKGD Bus Field Delay Memory



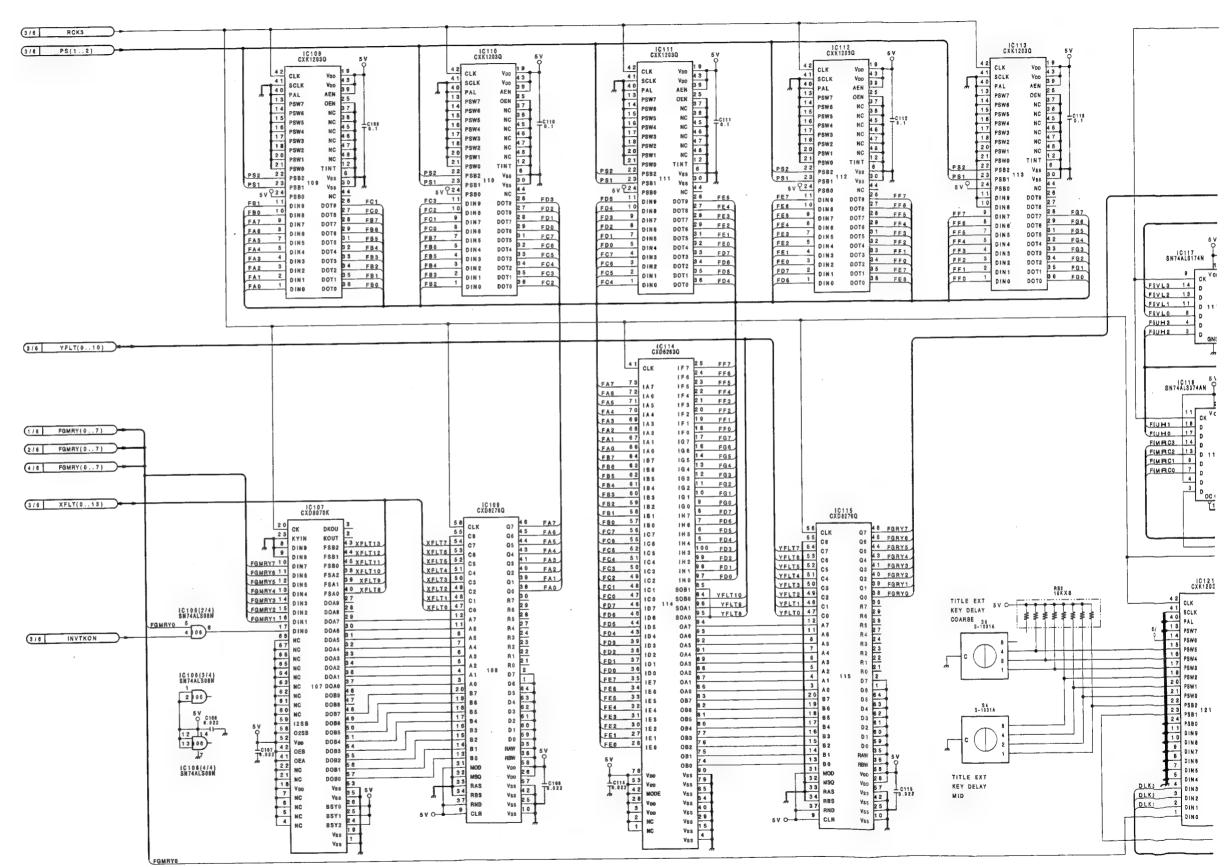
DFS-500 DFS-500P

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5 - 25

C

FM-29(6/6); FRGD Bus Digital Lowpass Filter



5 – 27

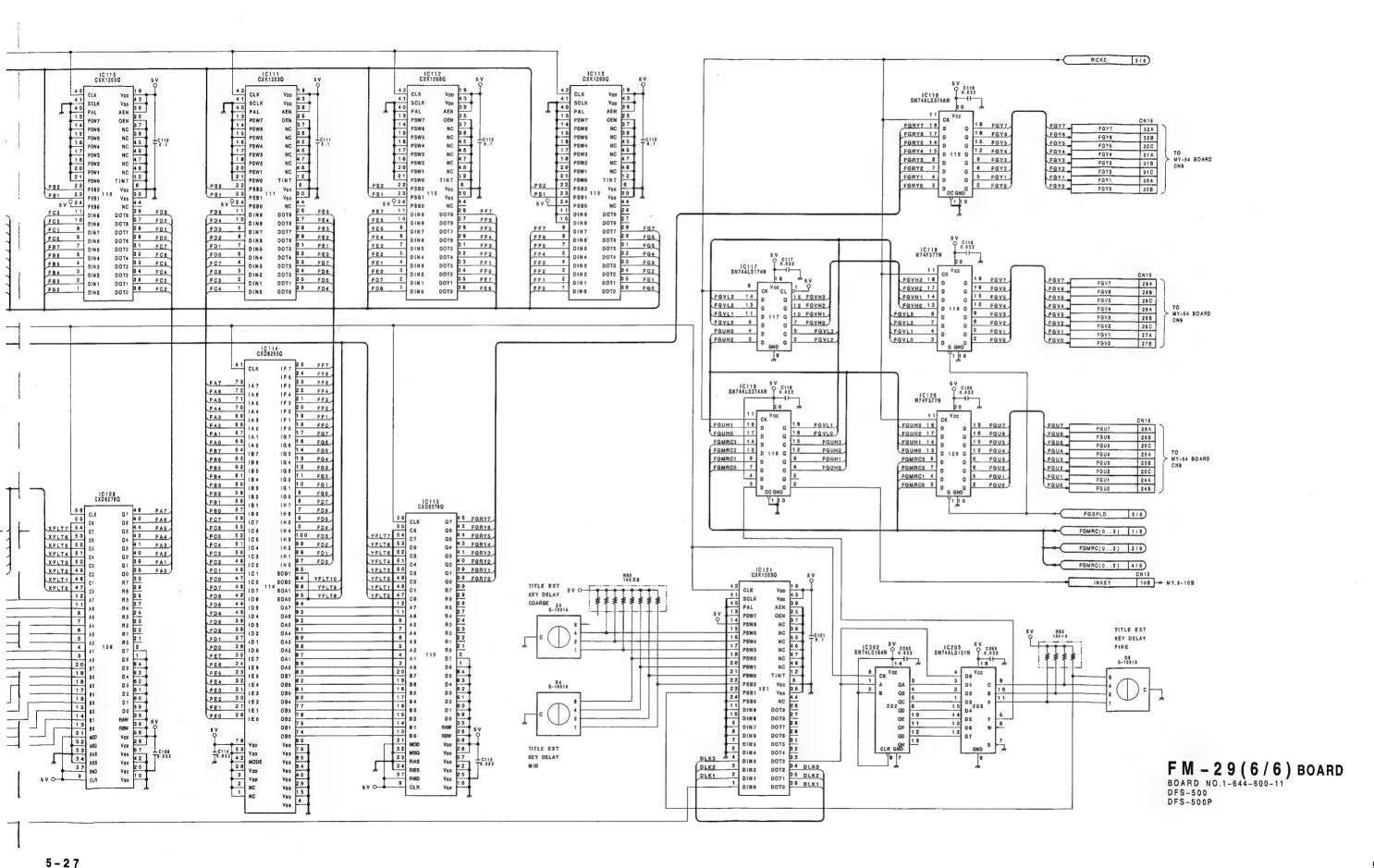
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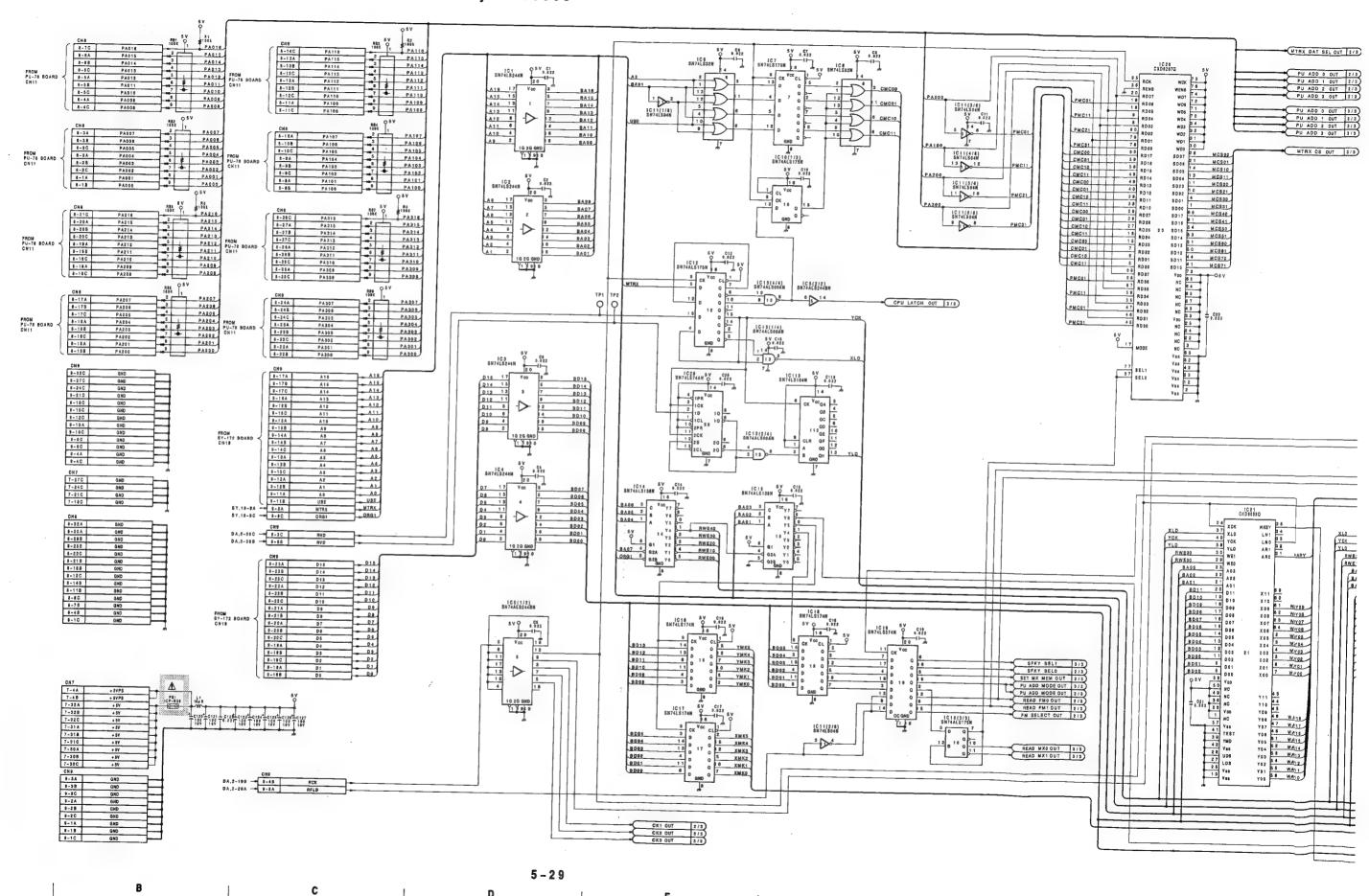
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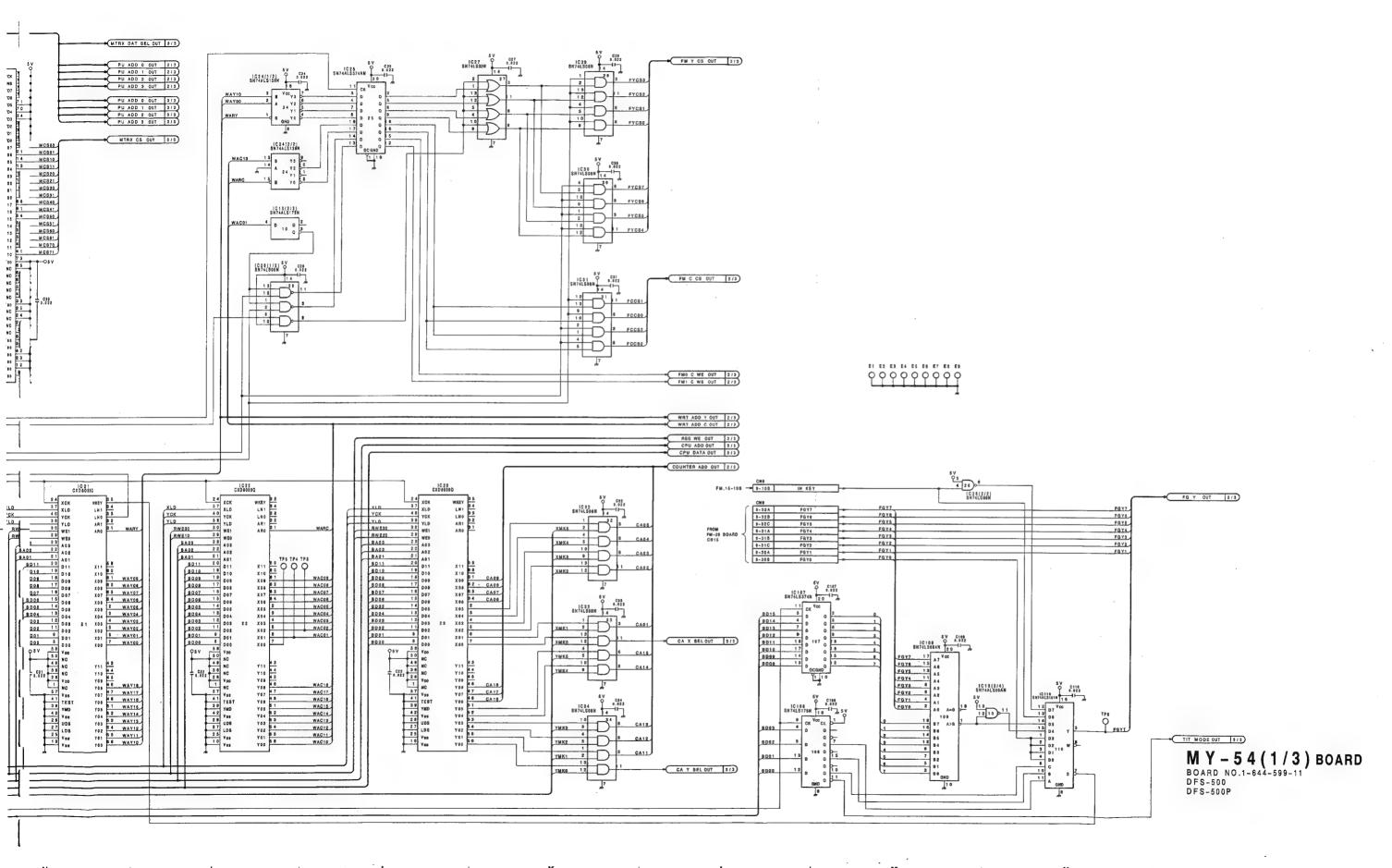
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5 - 27

# MY-54(1/3); Control Register, Address Counter, Title Key Process

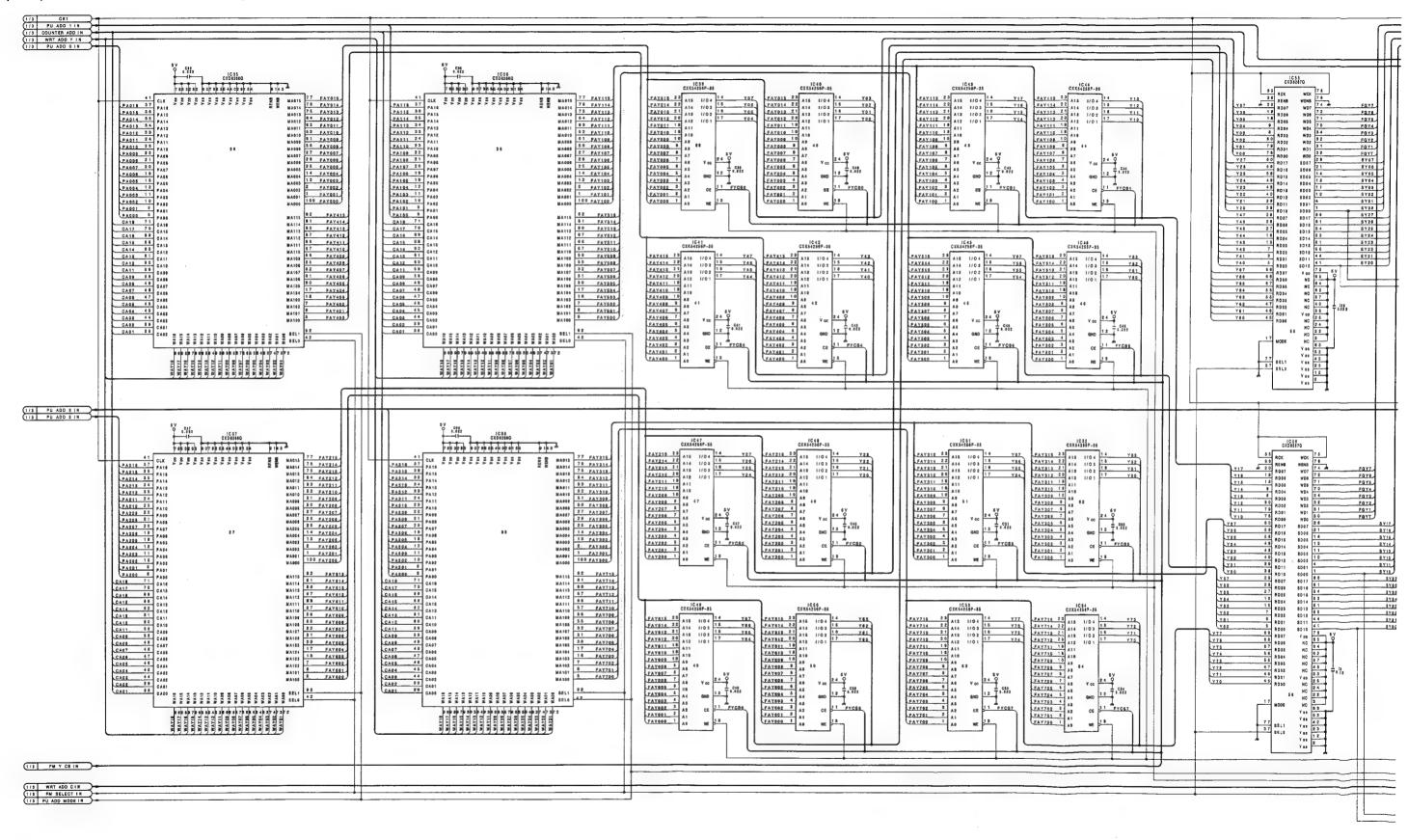




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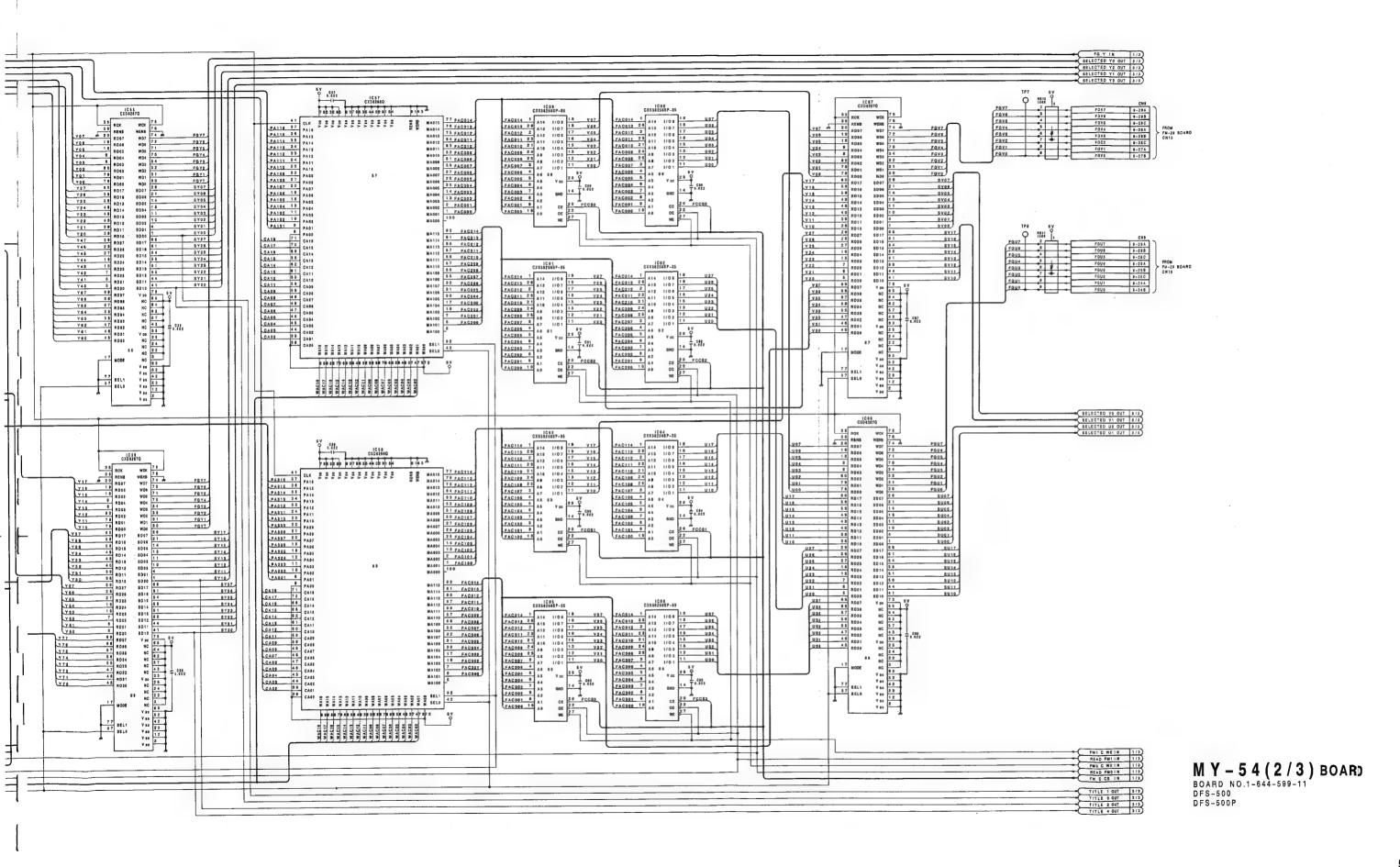
### MY-54(2/3); Video Effect Memory



5 - 31

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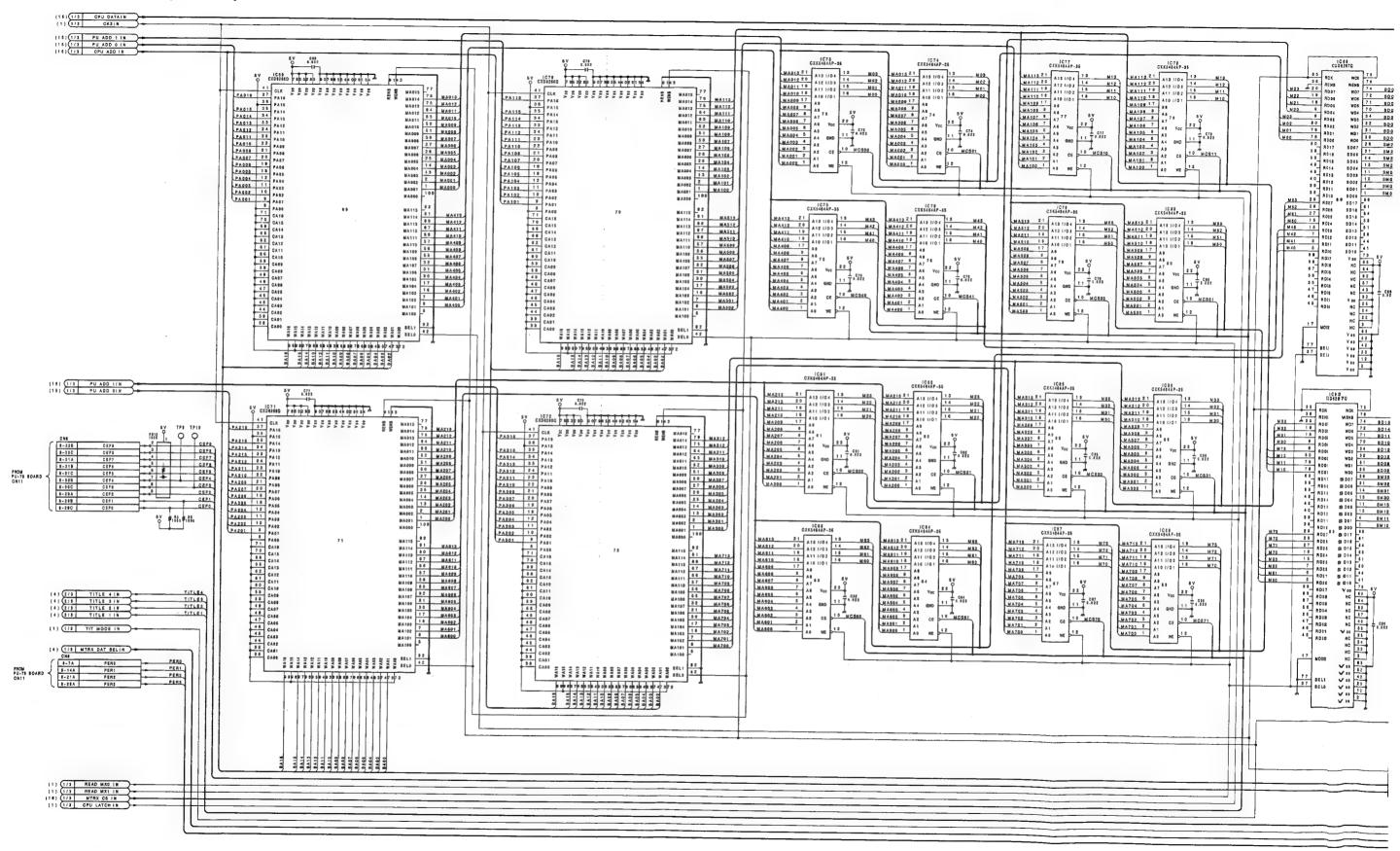
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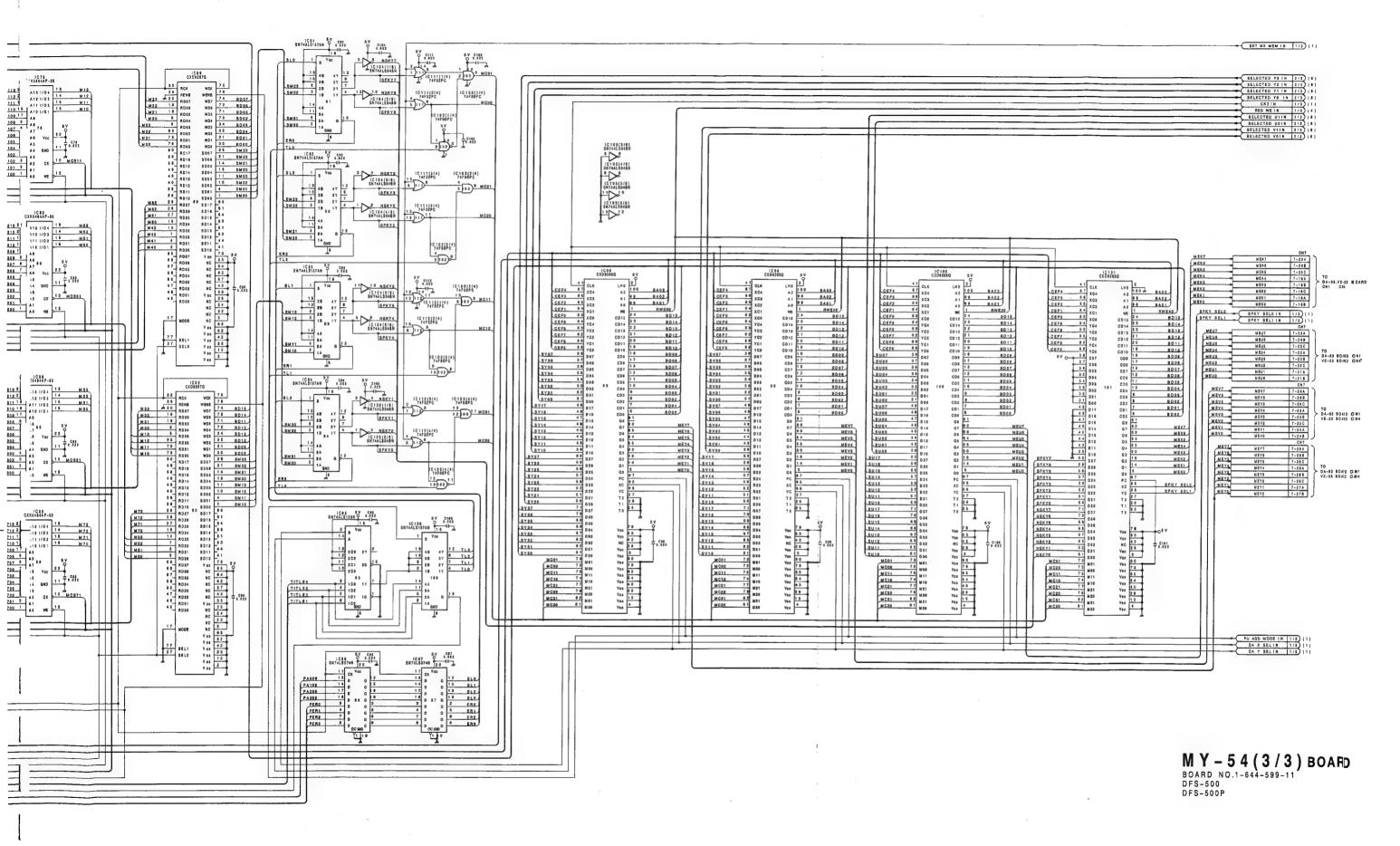
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# MY-54(3/3); Matrix Memory, Interpolater

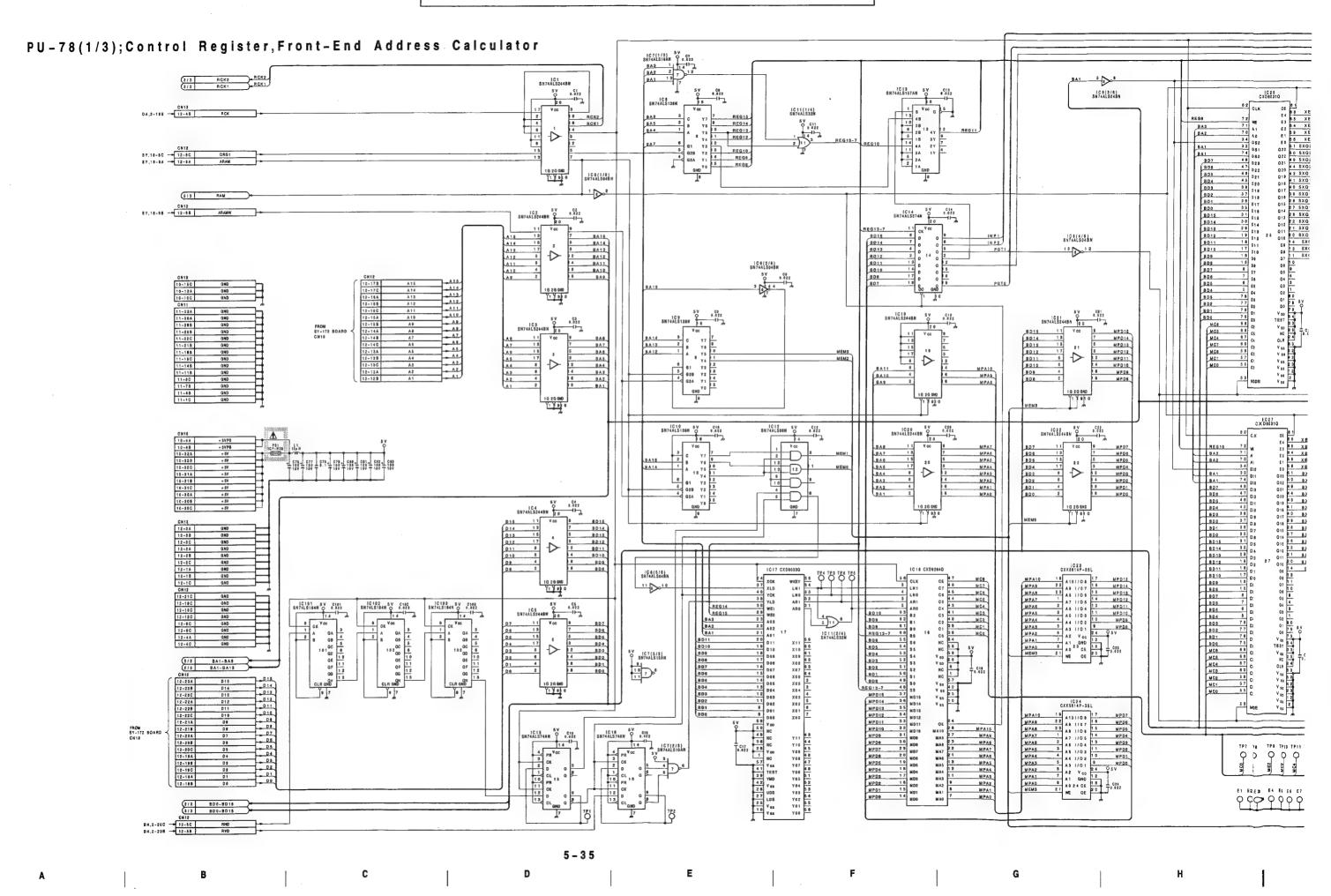


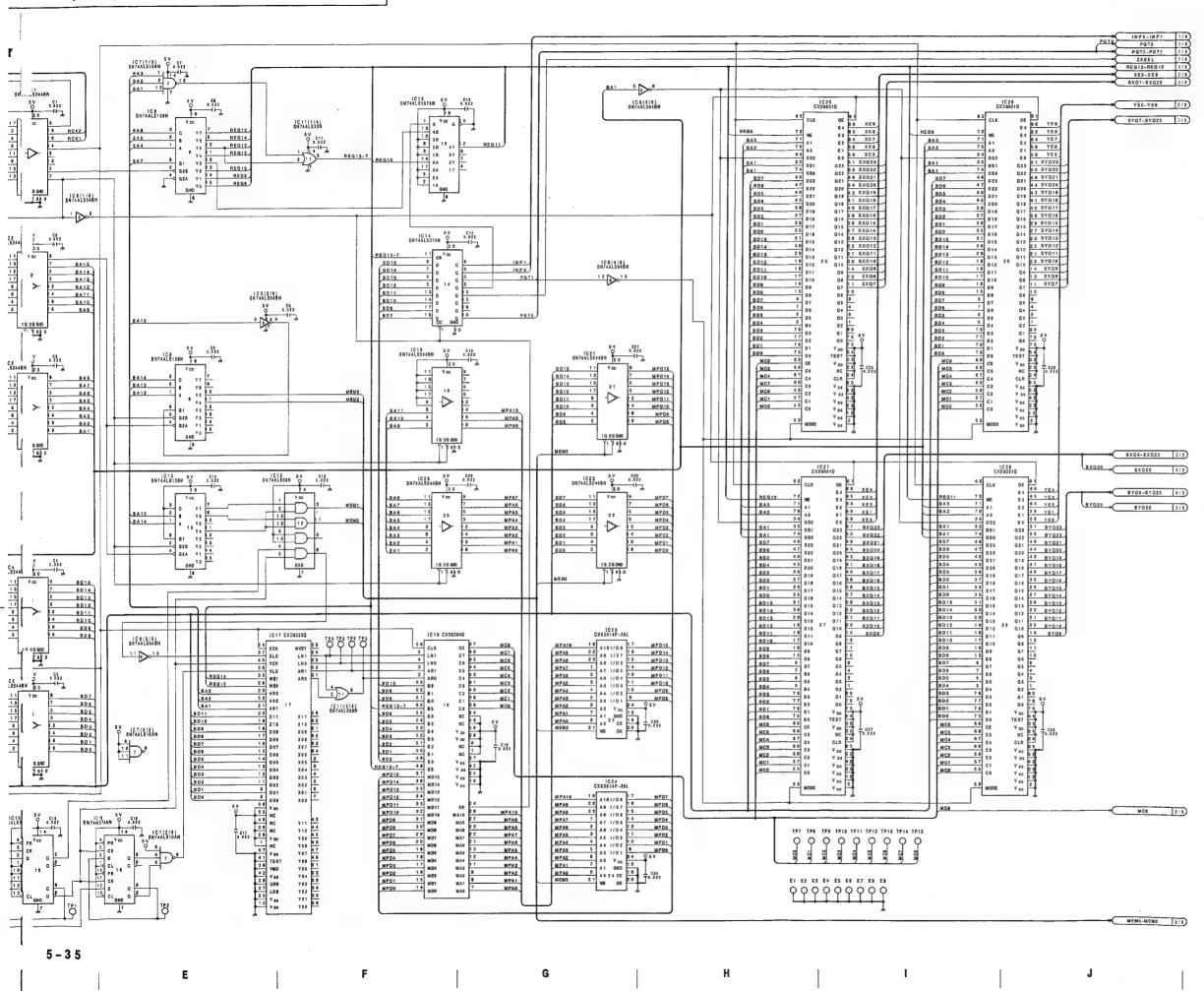
5 - 33

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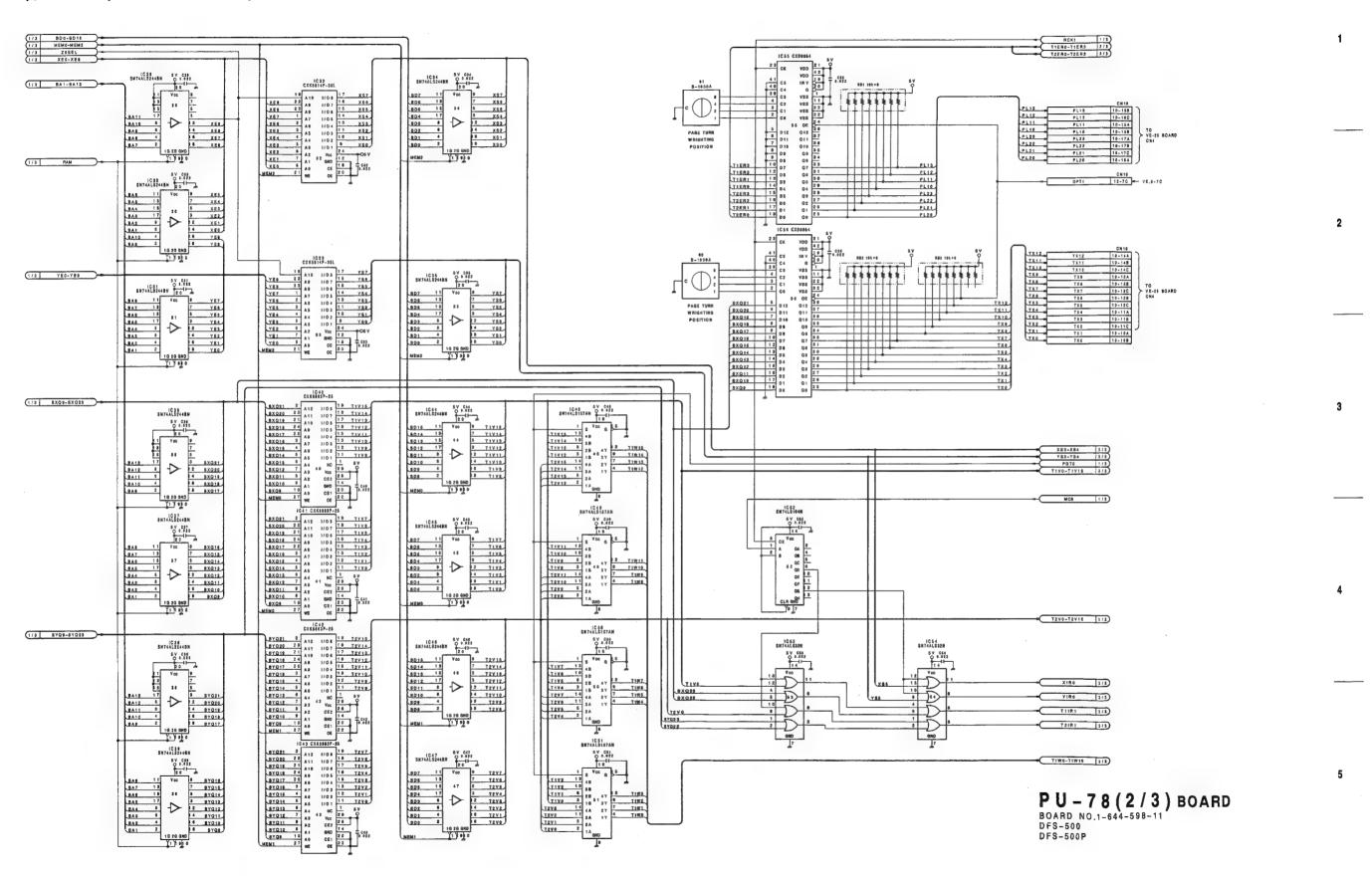




PU-78(1/3) BOARD
BOARD NO.1-644-598-11
DFS-500
DFS-500P

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#### PU-78(2/3); Look Up Table Memory



5 – 37

5 – 3 7

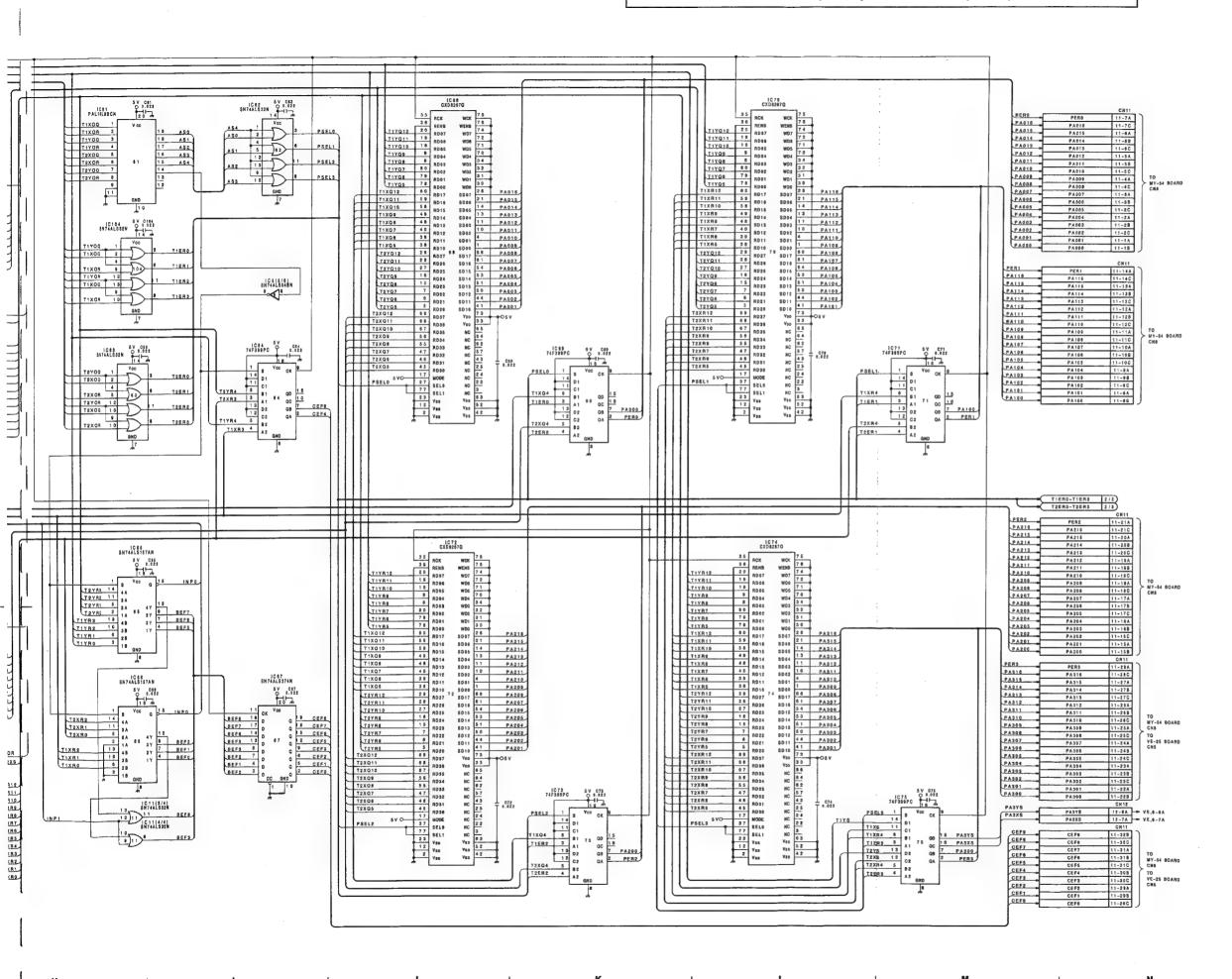
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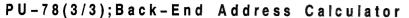
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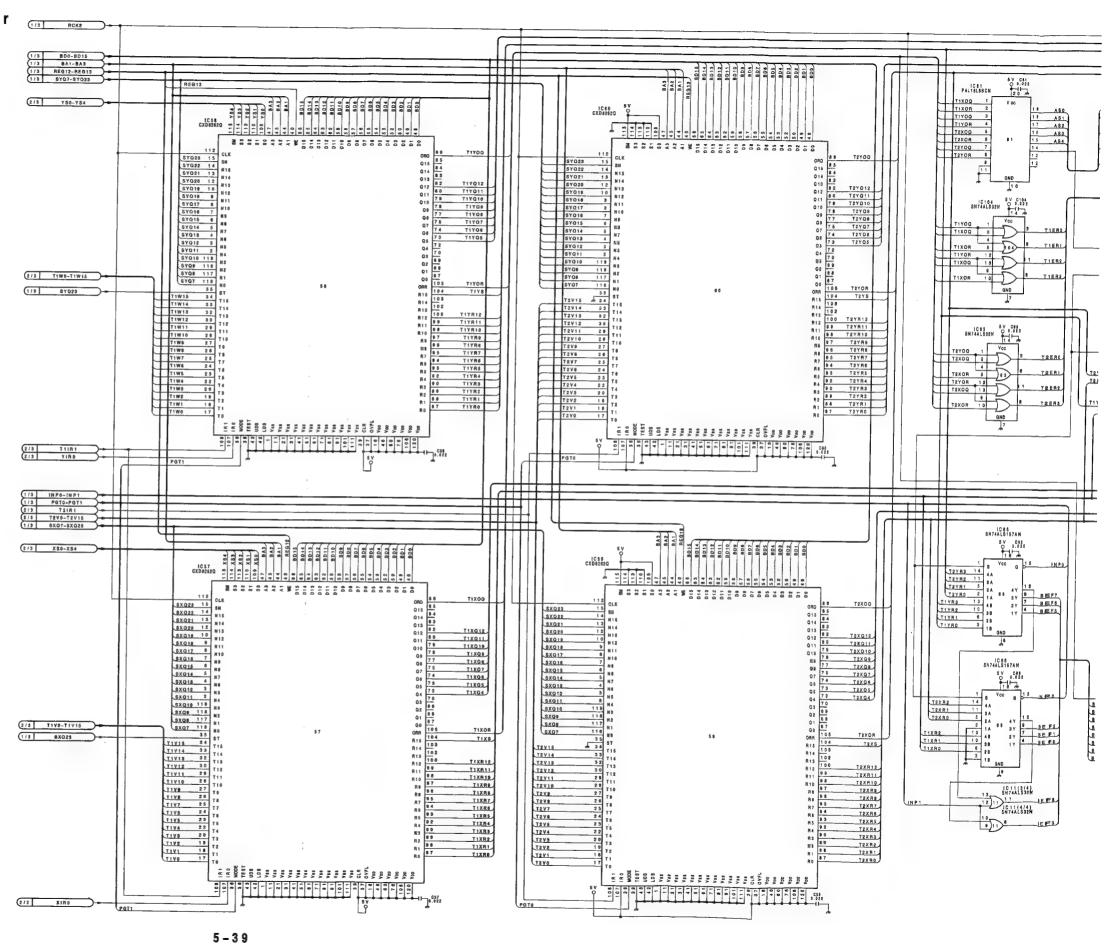


PU-78(3/3) BOARD
BOARD NO.1-644-598-11
DFS-500
DFS-500P

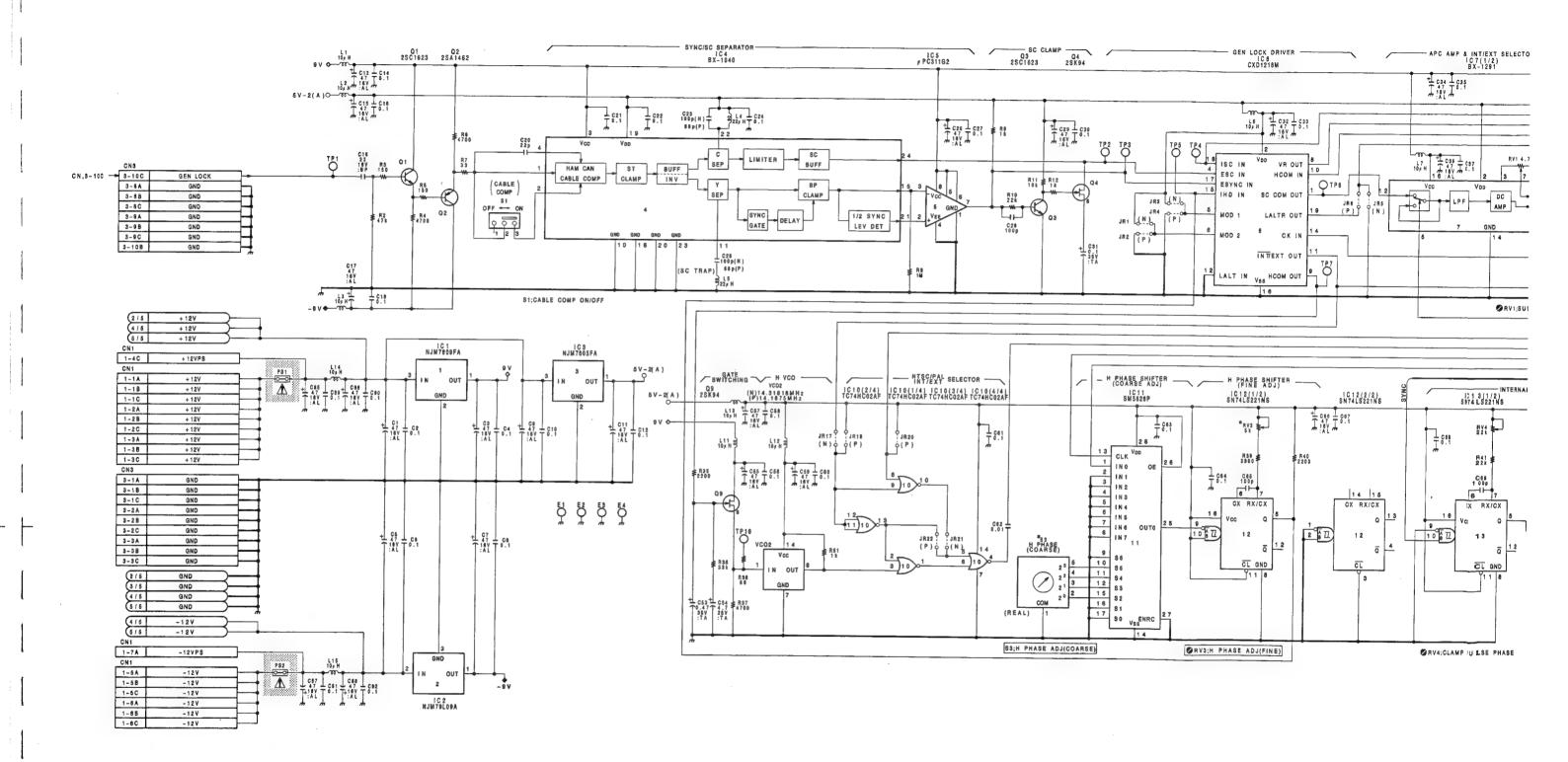
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### DA-63(1/5); SYNC Generator



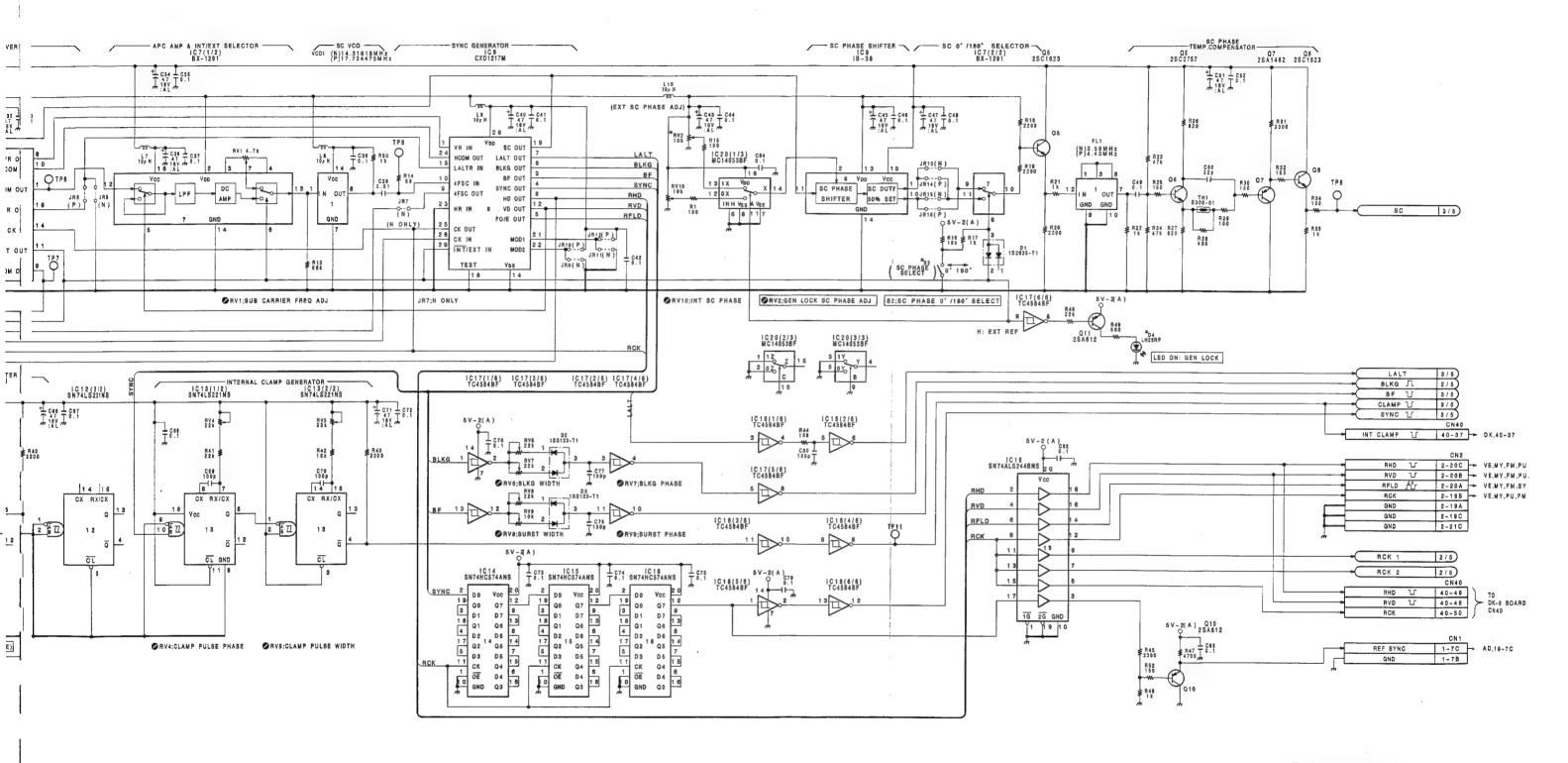
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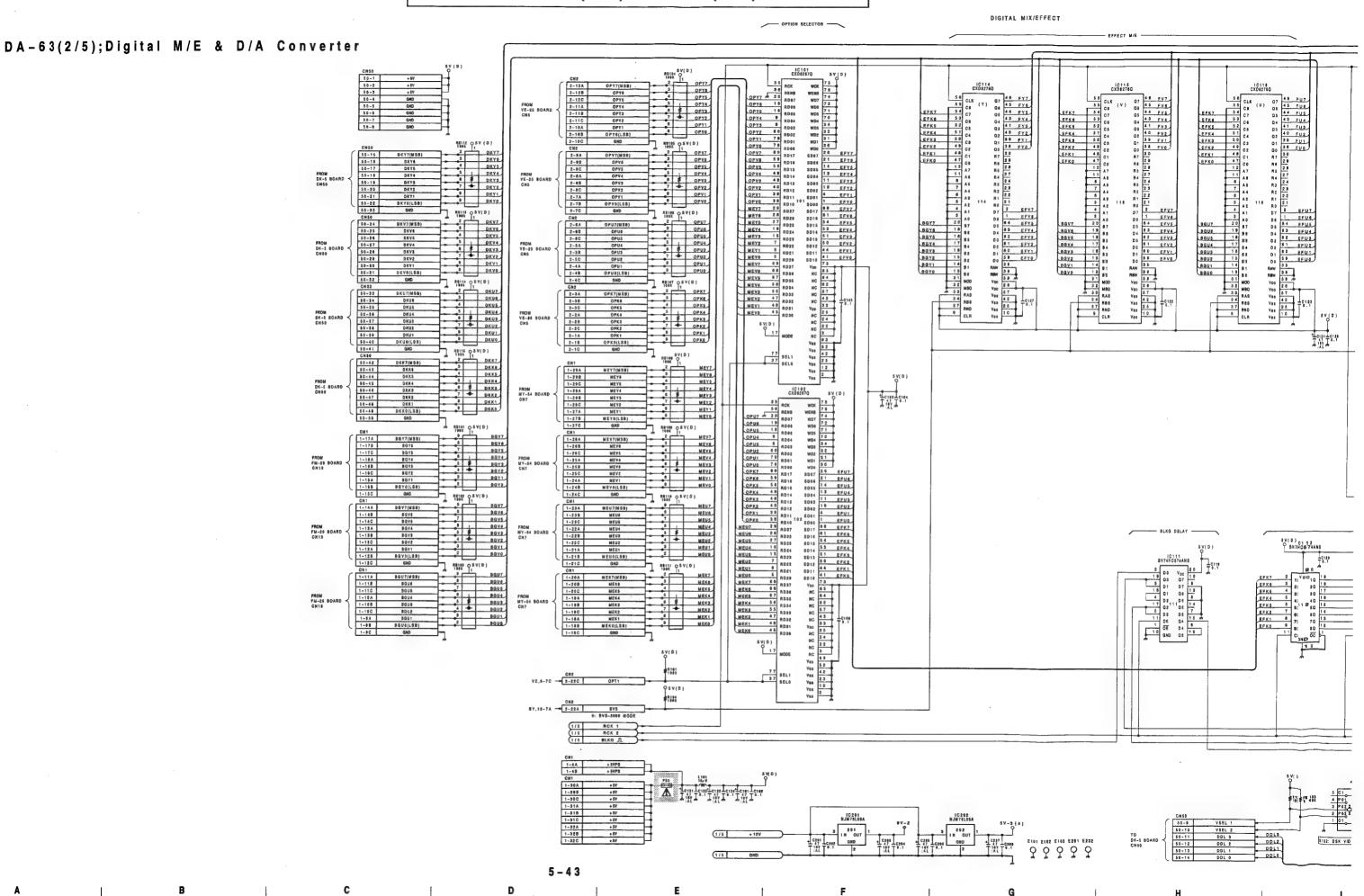
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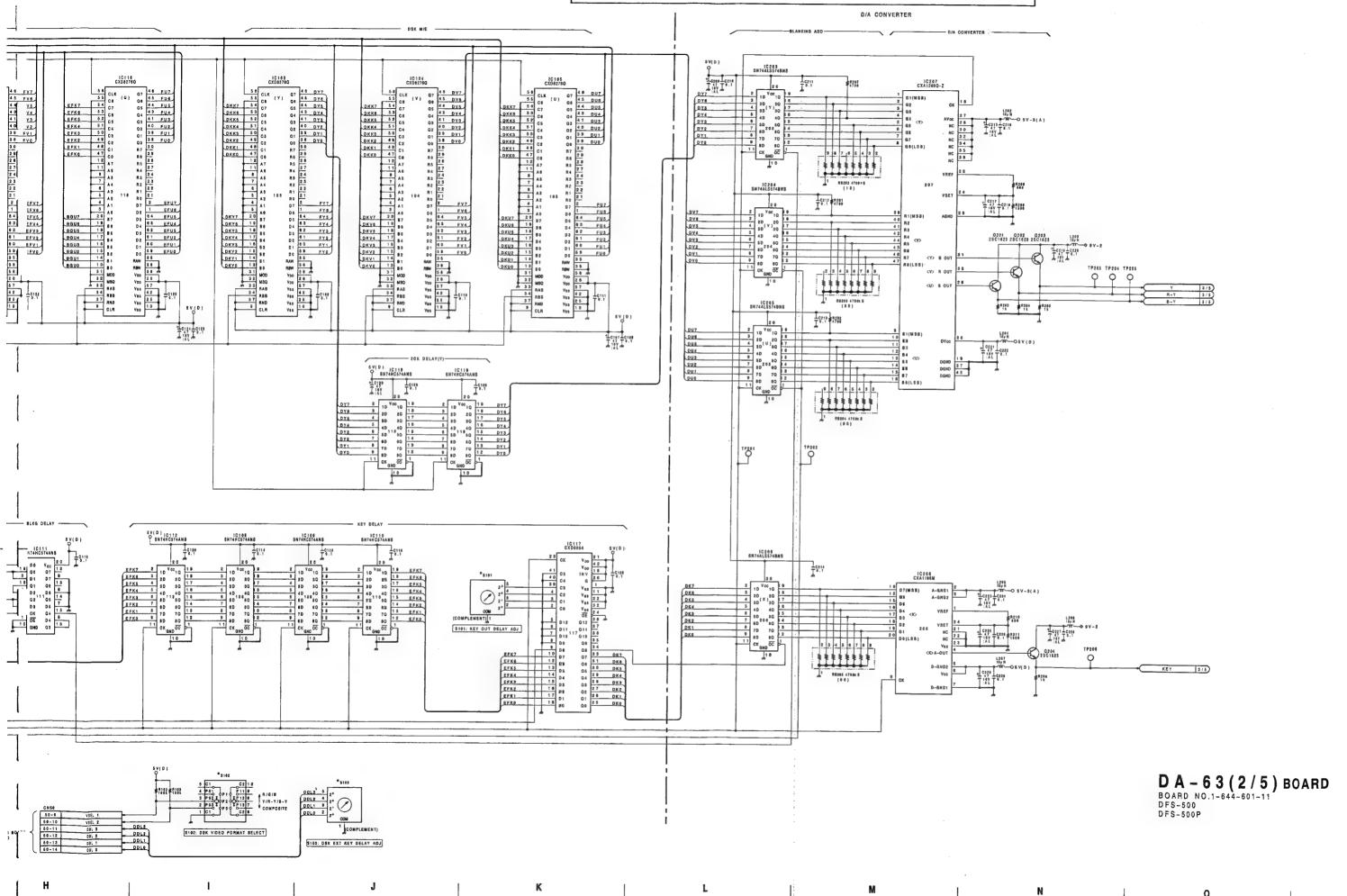
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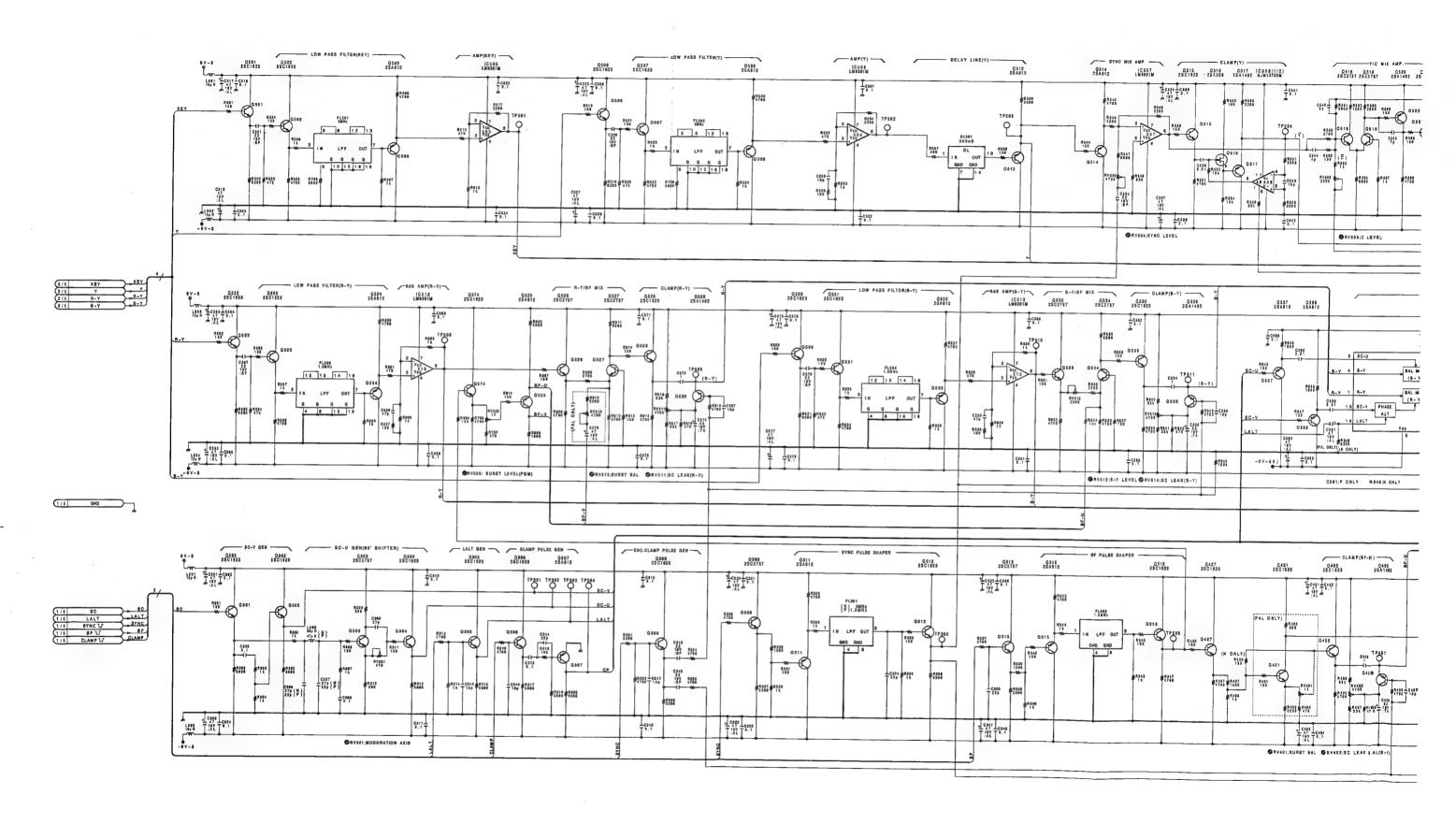


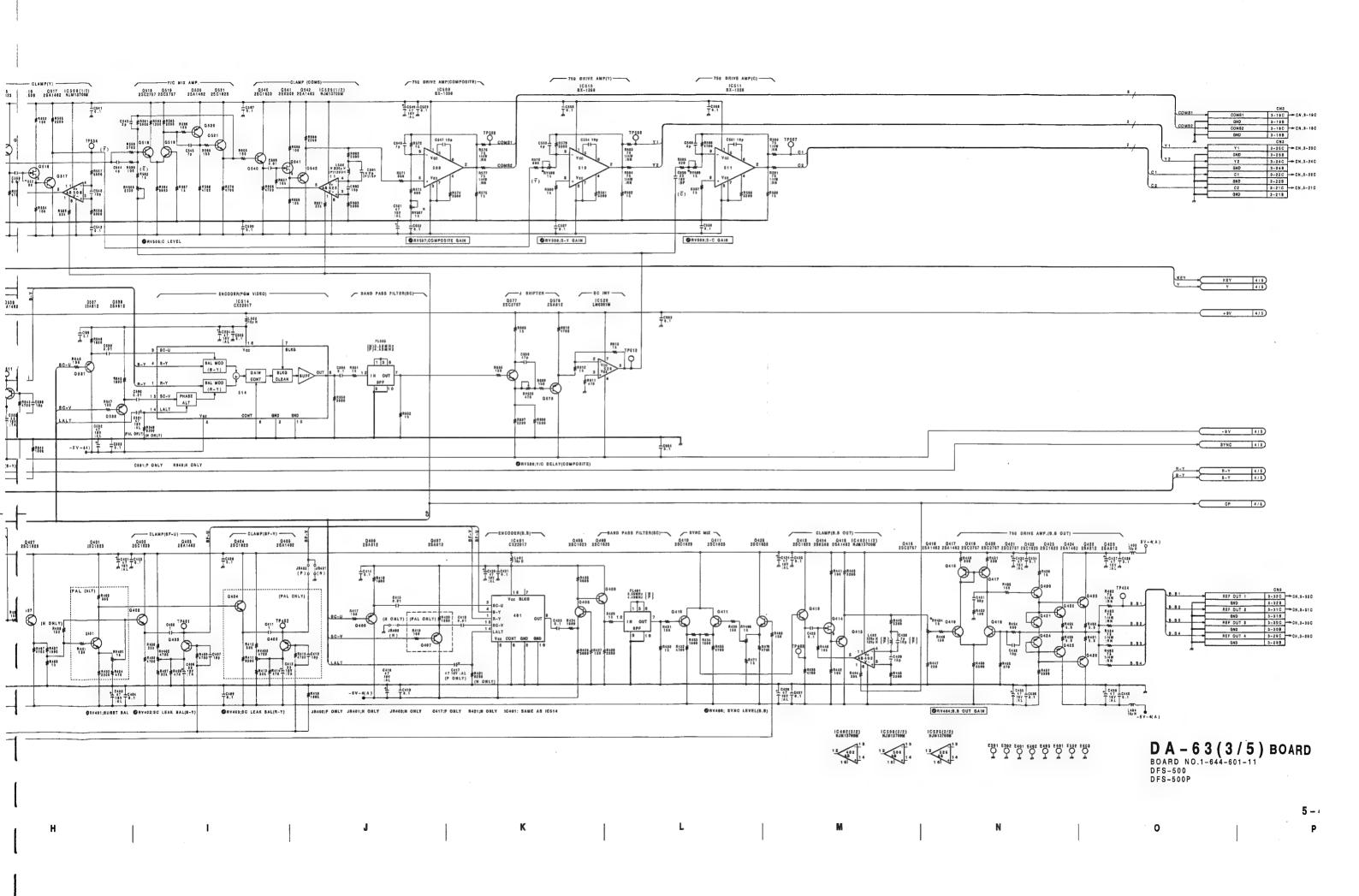
DA-63(1/5)BOARD BOARD NO.1-644-601-11 DFS-500 DFS-500P



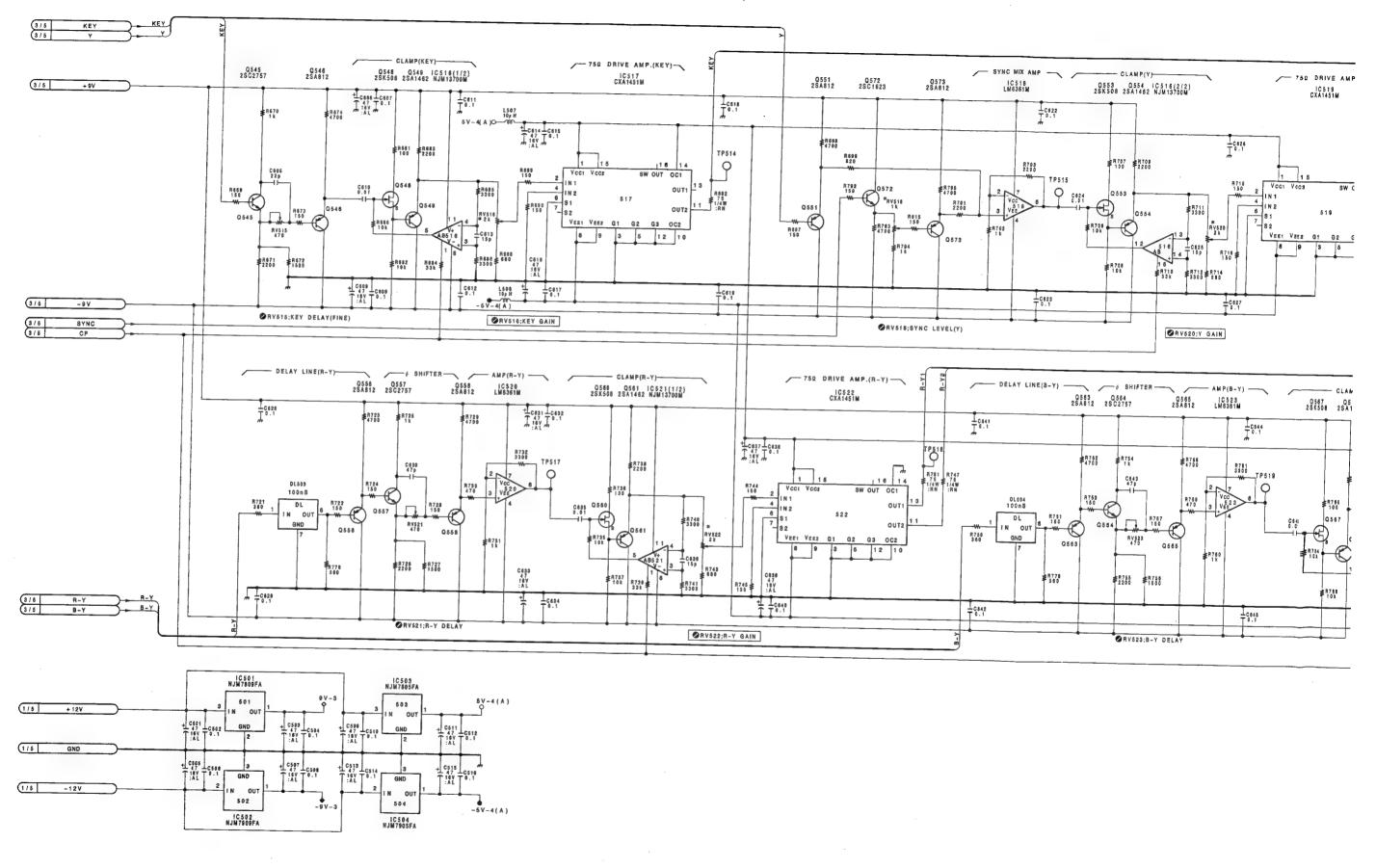


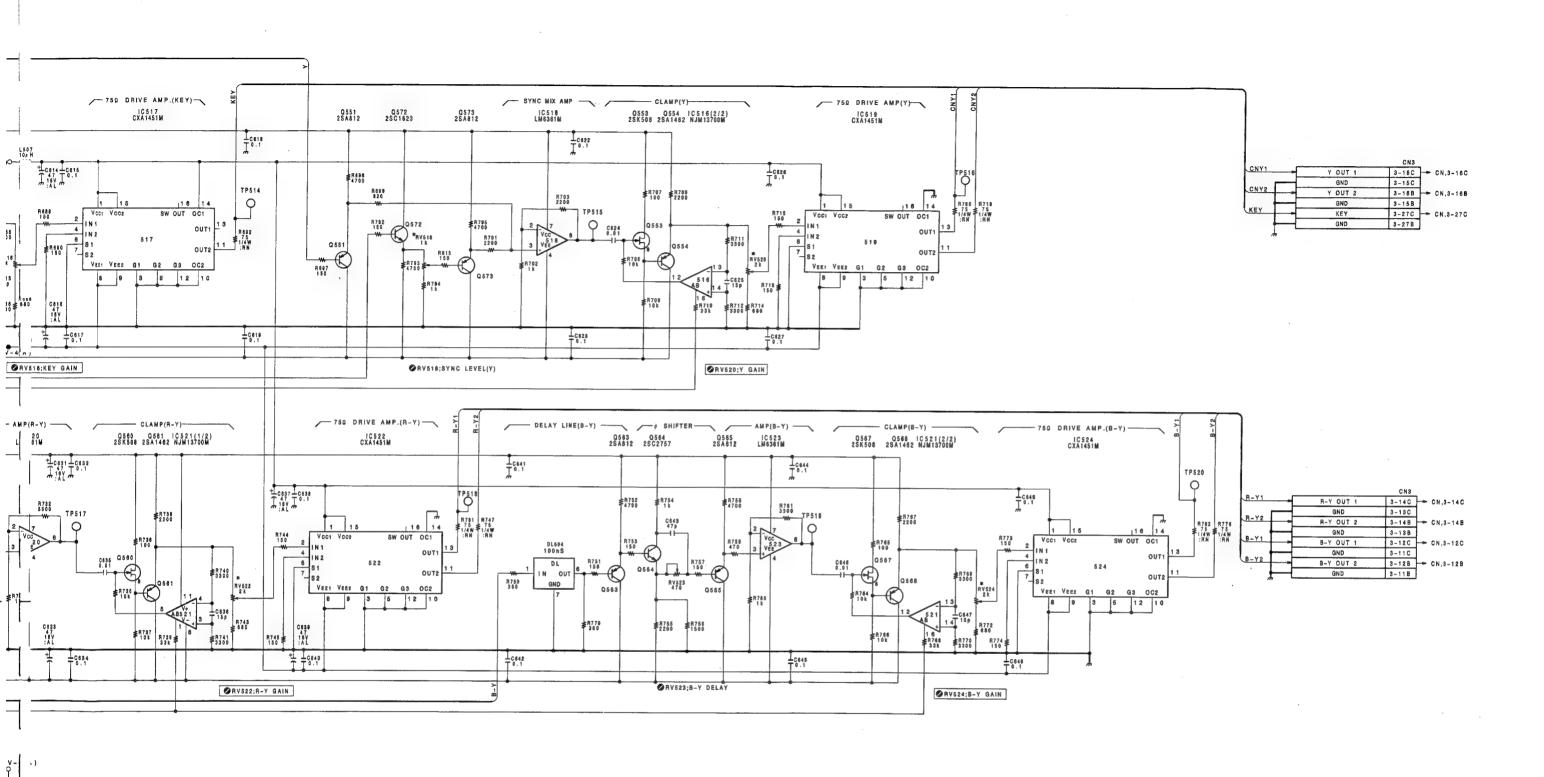
## DA-63(3/5); PGM Out(Composite, S) Processor & B.B Generator





## DA-63(4/5); PGM Out(Component) & Key Out PRO





DA-63(4/5) BOARD
BOARD NO.1-644-601-11
DFS-500

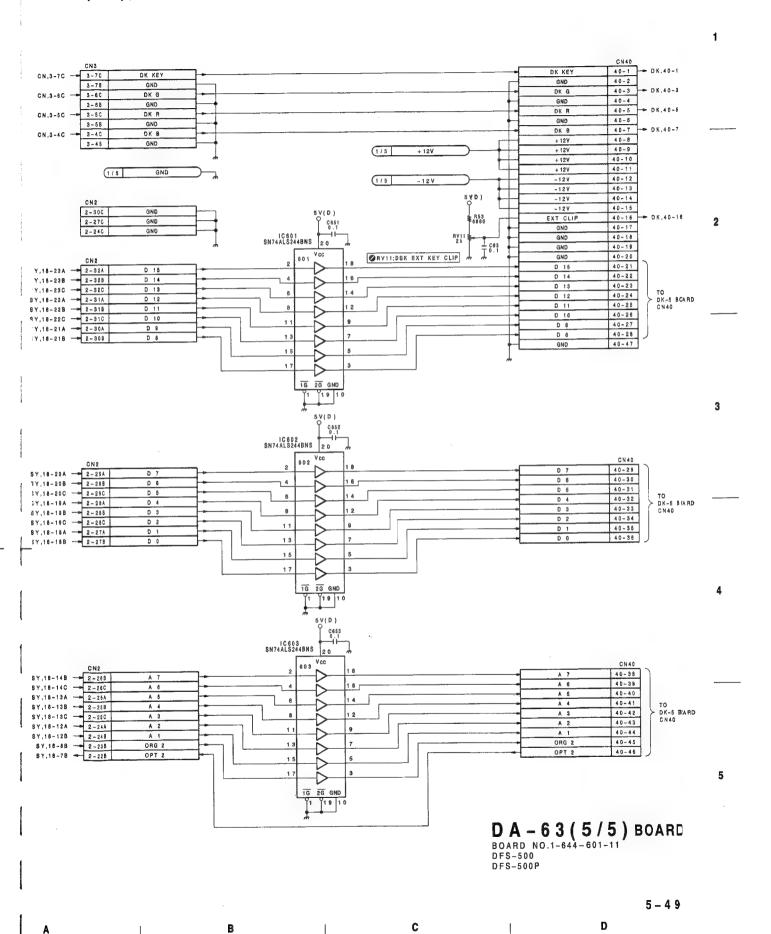
5-47

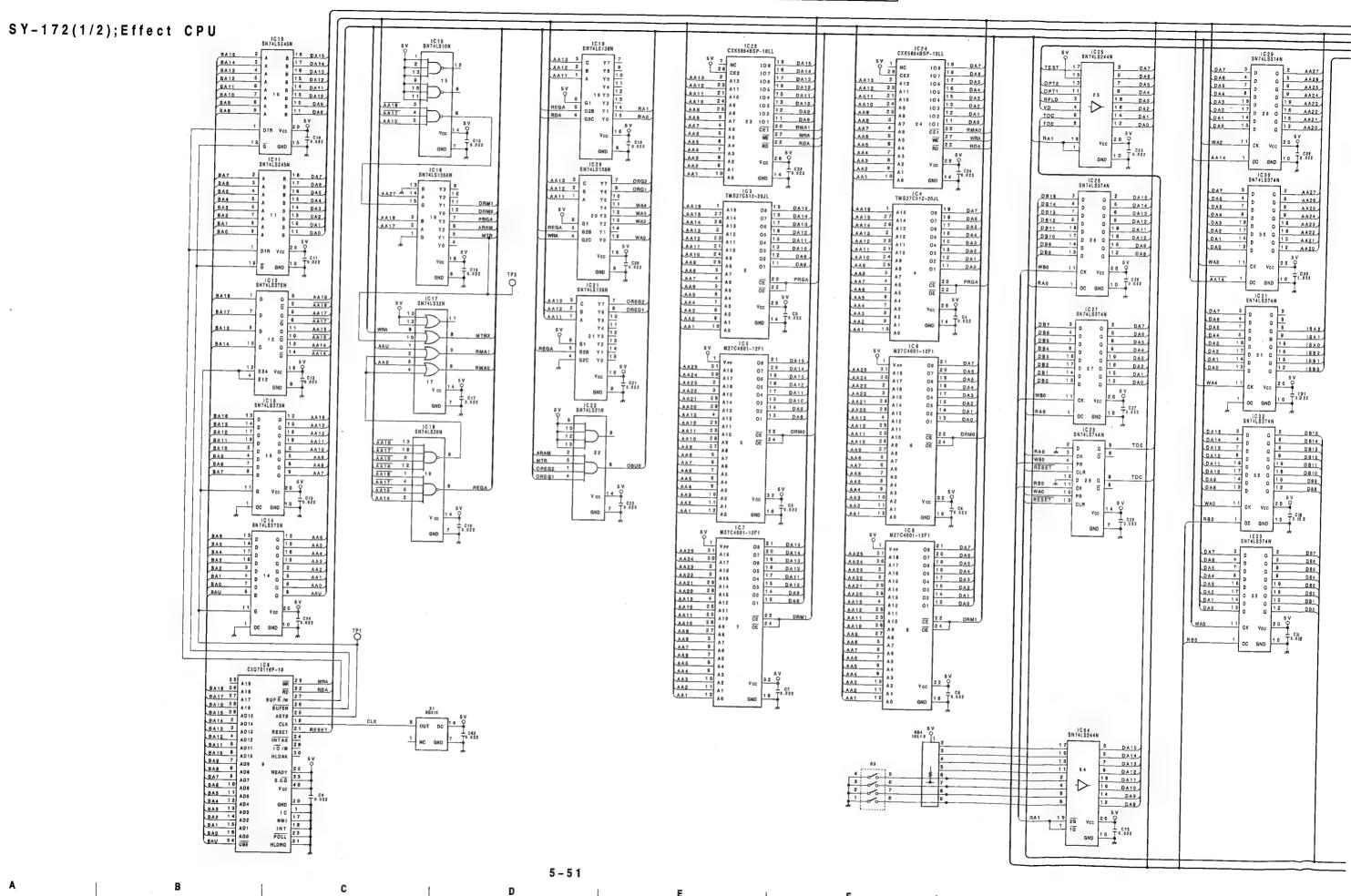
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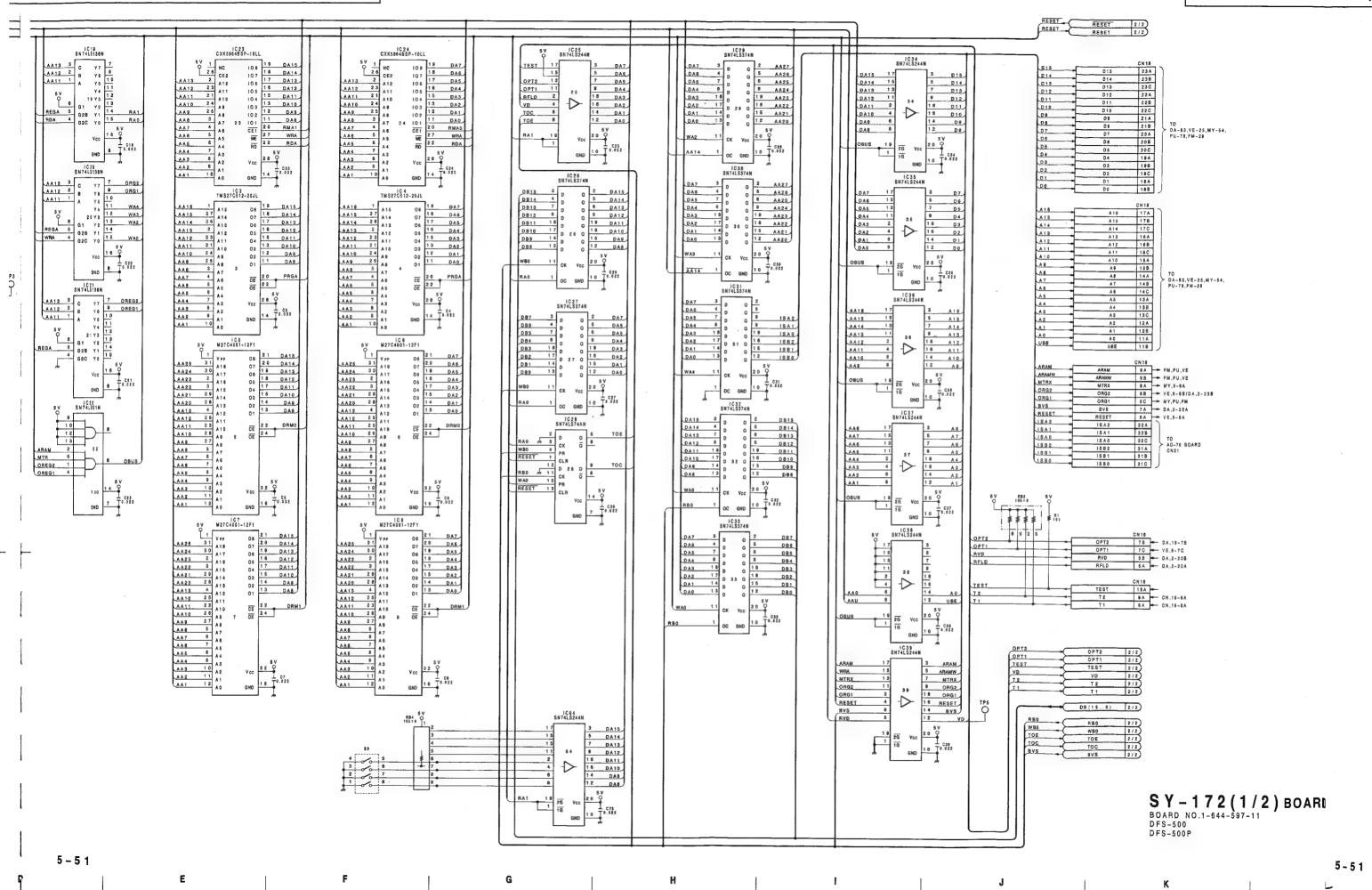
\$**- 47** 

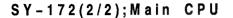
#### DA-63(5/5); Address & Data Bus Driver

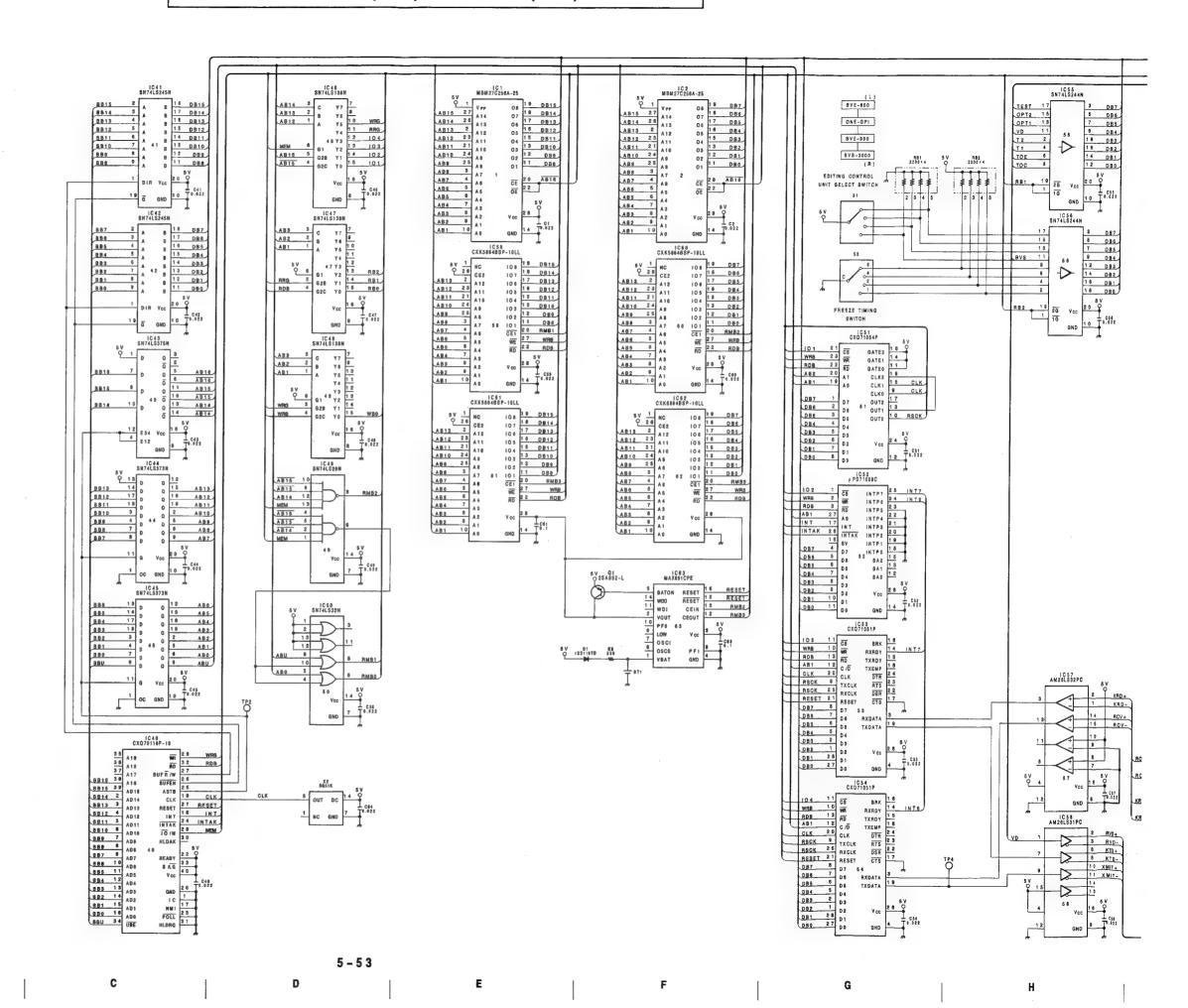


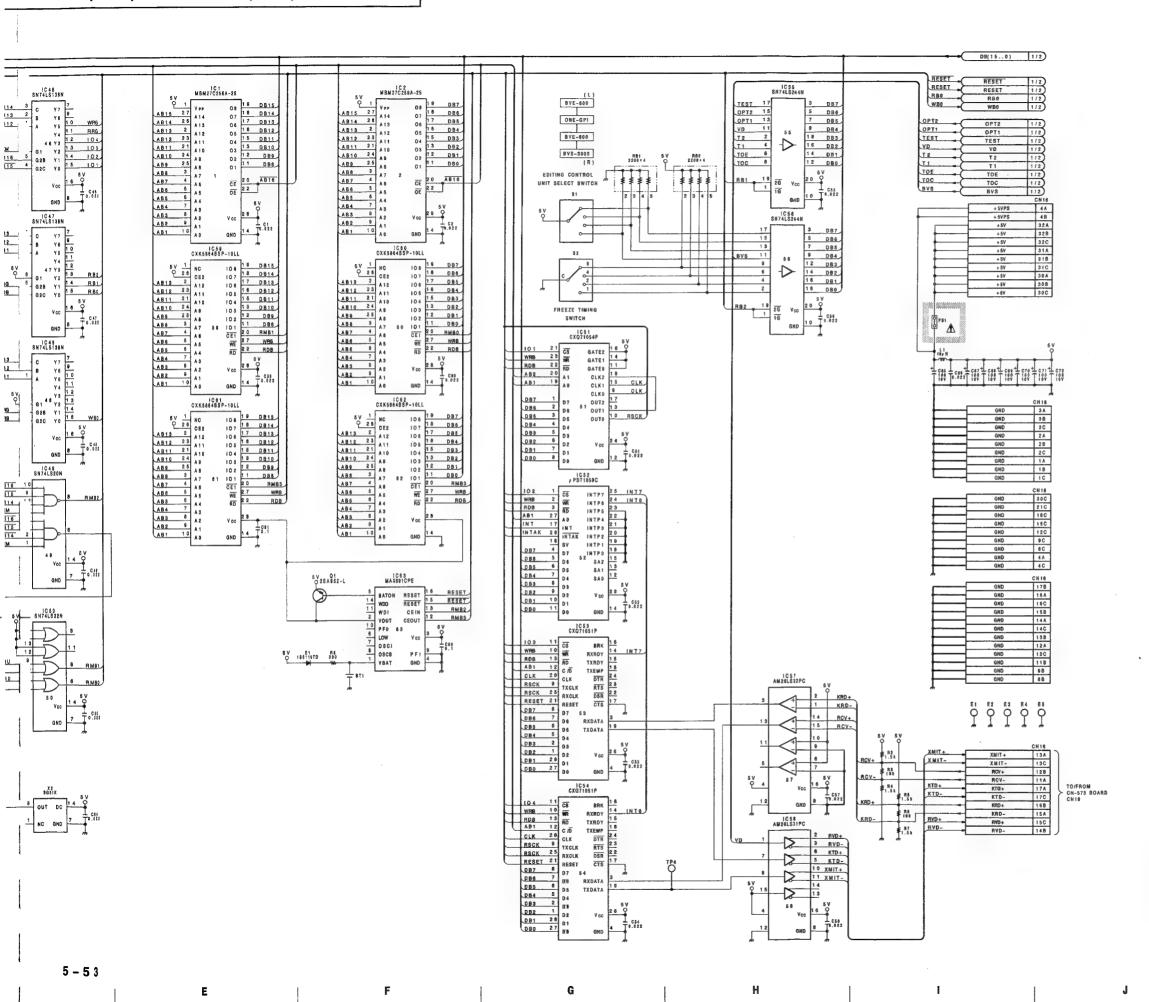


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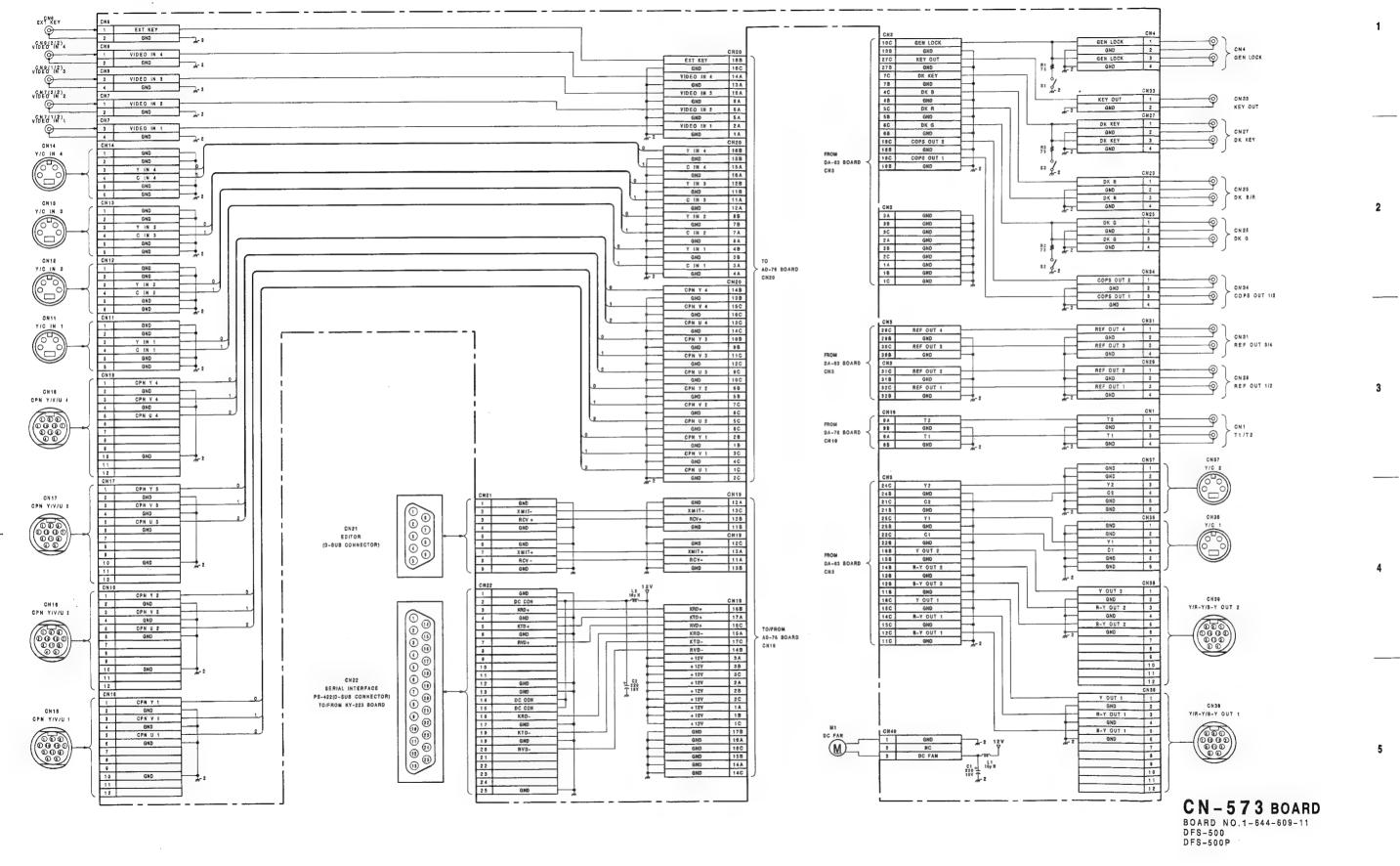




**SY-172(2/2)**BOARD NO.1-644-597-11
DFS-500
DFS-500P

5 – 5 3

#### CN-573; Connector Board



5 – 5 5

5 - 5 5

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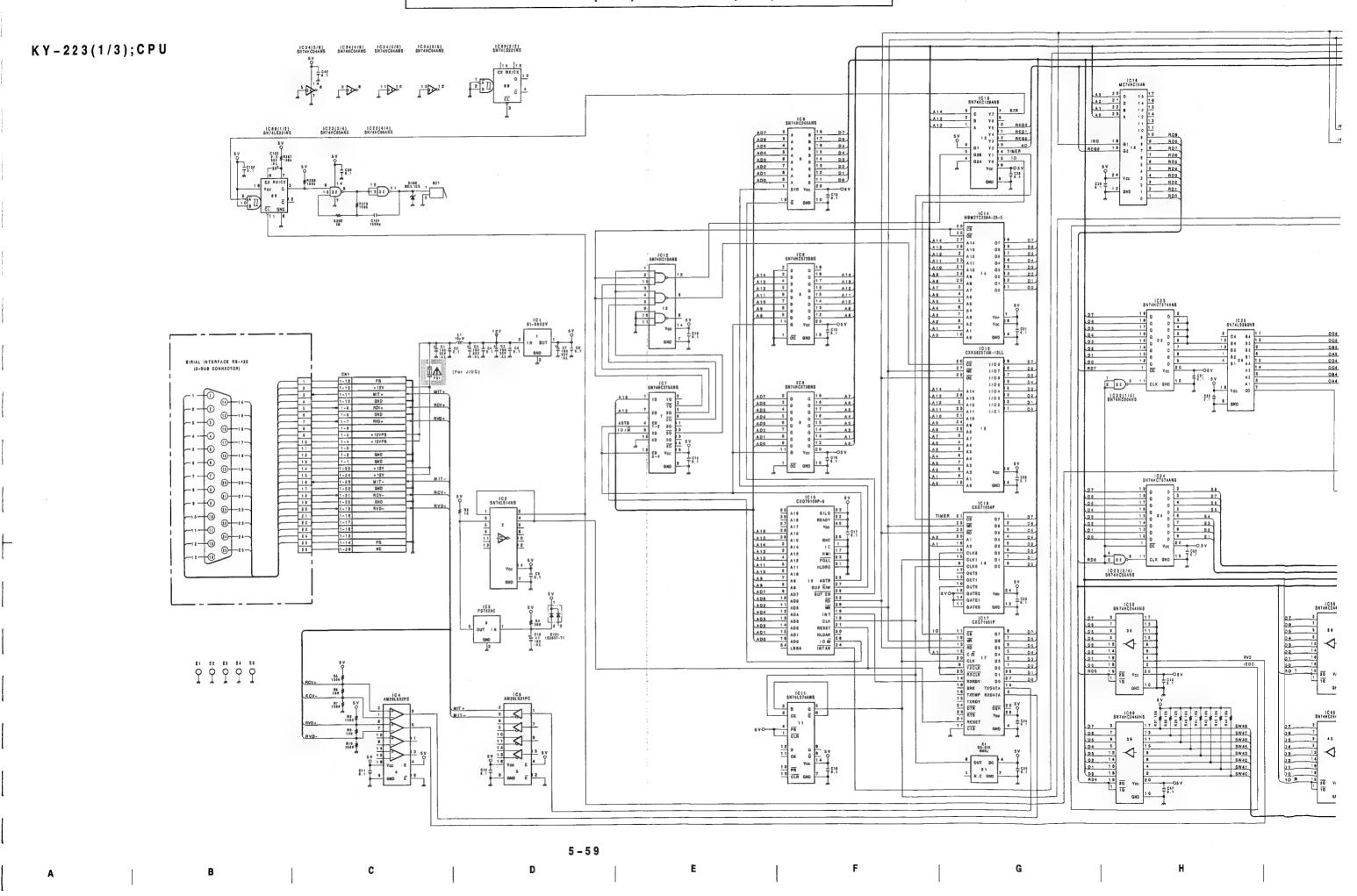
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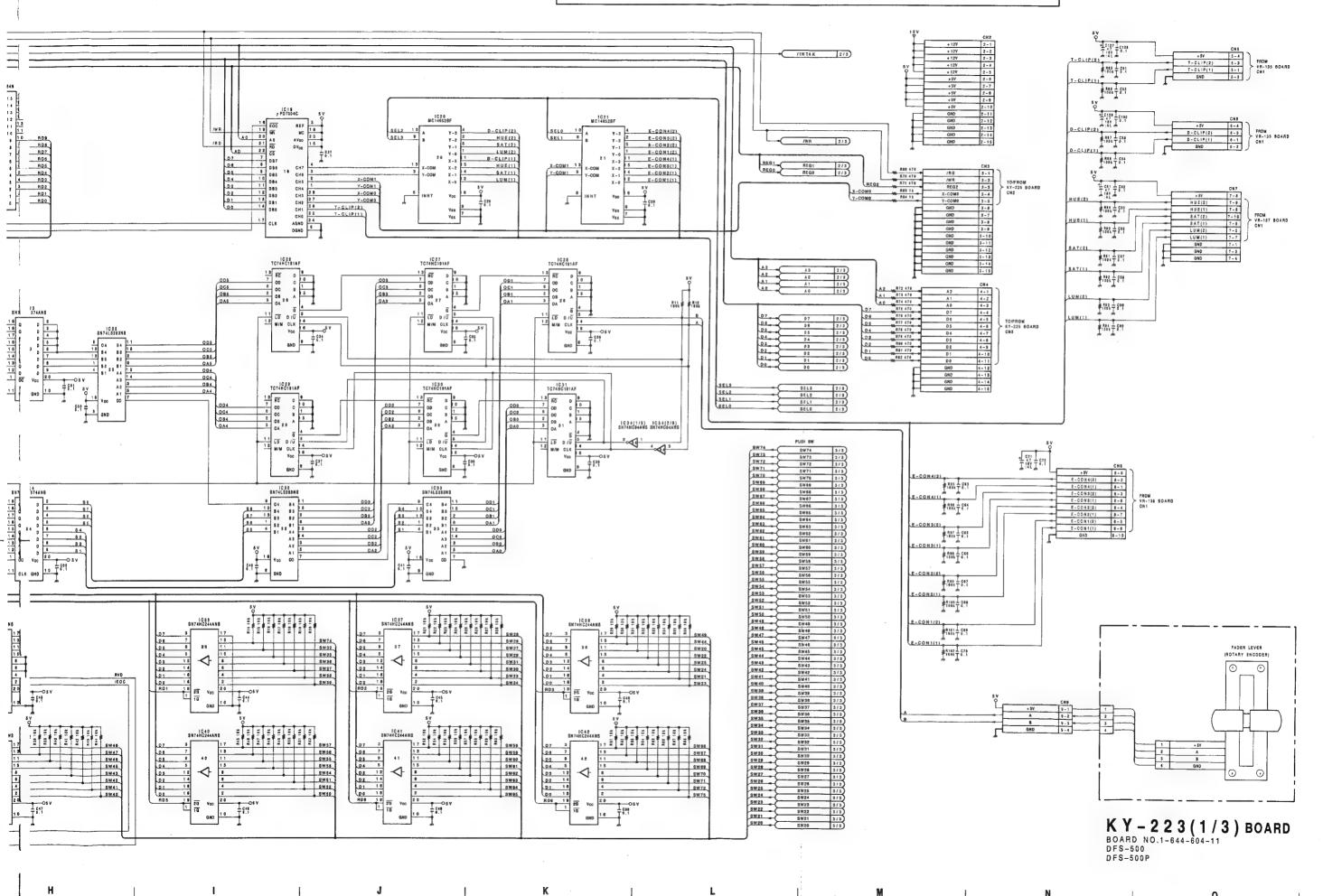
	DA-63	VE-25	MY – 5 4	PU-78	F M- 2 9
13	CNS  B	S	S	CN12  8 C  3 1 FGY  3 2 FGY  3 2 FGY  3 3 FGY  3 5 FGY  3 6 FGY  2 7 FGV  2 8 FGU  2 4 FGU  2 4 FGU  2 5 FGU  2 4 FGU  2 5 FGU  2 6 FGU  2 7 FGV  2 7 FGV  3 0 TGY  3 0 TGY  3 0 TGY  3 0 TGY  4 FGU  4 FGU  4 FGU  5 FGU  5 FGU  6 FGU  7 FGV  8 FGU  8 FGU  8 FGU  9 A FGU  19 D  10 GMD  11 A TZ  A 1 TZ  A	7 FGY 8 FGY 5 4 FGY 5 FGY 2 1 FGY 5 GNC 7 FGY 8 FGY 2 1 FGY 0 GNC 7 FGY 8 FGY 5 4 FGY 3 FGY 2 1 FGY 0 GNC 7 FGU 8 FGY 5 1 FGY 0 GNC 7 FGU 8 FGU 8 4 FGU 3 FGU 2 1 FGU 0 GNC 5 D11 D10 8 D8 GNC 7 D 8 D 8 4 D 9 GNC 1 D 0 GNC 1 D 0 GNC 1 D 0 GNC 1 D 0 GNC 1 D 1 GNC 1 D 0 GNC 1 D 1 GNC 1 D 1 GNC 1 D 0 GNC 1 G
A 32 D 18 31 D 12 30 D 8 28 D 7 28 D 7 28 D 4 27 D 1 28 C 7 28 D A S 25 A S 26 A S 21 21 20 RFLD 18 GND 18 17 18 15 15 14 11 12 OPY 7 11 OPY 4 10 OPY 1 5 OPU 7 5 OPU 4 7 OPY 1 6 OPU 7 5 OPU 4 4 OPU 1 3 OPK 7 2 OPK 7 2 OPK 4 1 OPK 1	DNE  B	CHS  B C C  OEF 9 CEF 8  OEF 2 GND  31 CEF 7  30 GND  20 CEF 2  30 GND  20 CEF 2  20 CEF 2  22 CEF 2  30 GND  22 CEF 3  30 GND  24 CEF 3  27 PA 316  27 PA 316  28 PER 3  29 PER 3  21 PA 306  22 PA 307  23 PA 307  23 PA 307  23 PA 307  23 PA 307  24 PA 307  27 PA 316  31 PER 3  31 PER 3  32 OFF 2  32 CHANNO  31 PA 316  32 PA 316  33 PA 207  34 PER 3  35 PA 101  36 PA 104  37 PER 0  48 PA 101  59 PA 104  50 PV 3 OFV 2  0PV 4 OPV 5  0PV 5 OPV 5  0PV 9 OND  0PV 9 OPV 1 S  0PV 1 S  0PV 1 S  0PV 1 S  0PV 2 S  0PV 2 S  0PV 2 S  0PV 3 OPV 2  0PV 9 OND  0PV 9 OPV 1 S  0PV 1 S  0PV 1 S  0PV 1 S  11 PA 108  12 PA 101  13 PA 101  14 PER 1  15 PA 015  5 PA 015  5 PA 015  5 PA 015  17 PA 001  18 PA 001  19 PA 001	CN8  B C C CEF 9 CEF 6 CEF 6 CEF 5 CEF 1 CEF 0 CEF 1 CEF 0 GND PA 316 PA 314 PA 315 PA 311 PA 315 QND PA 318 PA 316 PA 308 PA 308 PA 309 PA 308 PA 309 PA 309 CAPPA CAPP	ON11  B CF	BWY   BWW
\$ + 12Y	B	CH4  B C +5V +5V +5V  +5V +5V  +5V +5V  +4V +5V  +5V +5V   MEY 8 MEY 5  MEY 9 OND  MEY 9 MEY 2  MEY 0 OND  MEV 0 OND  MEU 8 MEU 5  MEU 0 OND  MEU 8 MEU 5  MEU 1  22 MEV 7  26 MEV 4  27 MEY 1  22 MEV 7  26 MEV 4  27 MEY 1  28 MEV 2  MEU 1  29 MEV 7  20 MEV 1  20 MEV 1  21 MEU 1  22 MEU 7  22 MEU 7  22 MEU 7  22 MEU 7  21 MEU 1  22 MEU 7  22 MEU 1  23 MEU 7  24 MEU 1  25 MEU 1  26 MEV 4  27 MEY 1  28 MEV 4  29 MEV 7  26 MEV 1  29 MEV 7  20 MEV 1  21 MEU 1  22 MEU 1  23 MEU 7  24 MEU 1  25 MEU 1  26 MEV 7  19 MEV 1  17 MEU 1  17 MEU 1  18 MEV 1  17 MEV 1  18 MEV 1  19 MEV 1  10 MEV 1  11 MEV 1  11 MEV 1  12 MEV 1  13 MEV 1  14 MEV 1  15 MEV 1  16 MEV 1  17 MEV 1  18 MEV 1  19 MEV 1  20 MEV 7  21 MEU 1  22 MEU 7  22 MEU 7  23 MEV 7  24 MEV 1  25 MEV 4  26 MEV 7  27 MEY 1  28 MEV 1  29 MEV 7  20 MEV 3  20 MEV 7  20 MEV	B	CM10  B C	+8V +6V +6V +6V +6V +6V +6V +6V +6V +6V +6
A B	C	D   E	F	G	н

MY-54	PU-78	F M- 29	SY-172	AD-76
25 FOU 4 FOU 3 24 FOU 4 25 FOU 4 25 FOU 4 26 FOU 1 26 CO 2 27 D 15 D 14 28 D 15 D 14 29 D 15 D 16 20 D 7 D 8 20 D 8 21 D 8 22 D 15 D 11 22 D 8 24 D 8 25 D 8 26 D 8 26 D 8 27 D 8 28 D 8	CH12  C	CHIS	CN18  A S C  32 15A 2 15A 7 18A 6  31 188 2 15B 1 15B 9  CND  28 CND  28 CND  28 CND  29 CND  20 CND  21 CND  22 CND  23 CND  24 CND  25 CND  26 CND  27 CND  28 CND  29 CND  20 CND  20 CND  21 CND  22 CND  23 CND  24 CND  25 CND  26 CND  27 CND  28 CND  29 CND  20 CND	AD-76  CN25  A B C C S S S S S S S S S S S S S S S S S
OEF 3	CHII  C C A B C C C F B C C C F B C C C F B C C C F B C C C F B C C C F B C C C C	A S C 32 GMO GMD GMD GMD 31 SWYLD SWYD SWYD 30 GMO SWCK GMO 29 SWY R SWY 8 SWY 8 28 SWY 4 SWY 9 GMO 27 SWY 1 SWY 9 GMO 28 SWY 4 SWY 9 GMO 29 SWY 1 SWY 9 GMO 21 SWY 1 SWY 9 GMO 21 SWY 1 SWY 9 GMO 22 SWY 1 SWY 9 GMO 23 SWY 1 SWY 9 GMO 24 SWY 1 SWY 9 GMO 25 SWY 1 SWY 9 GMO 26 SWY 1 SWY 9 GMO 27 SWY 9 S		CM20  A 9 C 31 SWFLD GND GND GND 31 SWFLD SWVD SWWD 30 GND SWVD SWVD 30 GND SWVCK GND 20 SWY 7 SWV 8 SWY 5 21 SWY 4 SWY 5 SWY 2 27 SWY 1 SWY 5 SWY 5 28 SWY 7 SWV 8 SWY 6 29 SWY 7 SWV 8 SWV 8 21 SWV 1 SWV 8 SWV 8 22 SWV 1 SWV 9 GND 24 SWV 1 SWV 9 GND 25 SWV 1 SWV 9 GND 26 SWV 1 SWV 9 GND 27 SWV 8 SWV 8 SWV 8 28 SWV 1 SWV 9 GND 29 GND GND 20 GND GND 21 SWU 1 SWU 9 GND 21 SWU 1 SWU 9 GND 22 SWU 4 SWU 3 SWU 2 21 SWU 1 SWU 9 GND 21 SWU 1 SWU 9 GND 22 SWU 4 SWU 3 SWU 8 21 SWU 1 SWU 9 GND 21 GND GND 22 SWU 4 SWU 3 SWU 8 21 SWU 1 SWU 9 GND 21 GND CPN V4 31 GND 31 GND GND CPN V4 31 GND 31 GND GND CPN V4 31 GND CPN V4 31 GND CPN V5 31 GND CPN V7 31
# 68V	C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C A B C C C A B C C C A B C C C C	CN13  A B C 32 +5V +5V +5V +5V +5V 31 +5V +5V +5V +5V 30 +5V +5V +5V +5V 30 +5V +5V +5V +5V 20 AWY 7 AWY 5 AWY 5 28 AWY 4 AWY 3 AWY 2 27 AWY 1 AWY 0 OMO 25 AWY 7 AWY 0 AWY 5 25 AWY 4 AWY 3 AWY 2 26 AWY 7 AWY 0 AWY 0 OMO 25 AWY 4 AWY 3 AWY 2 21 AWY 1 AWY 0 OMO 22 AWY 4 AWY 3 AWY 2 21 AWY 1 AWY 0 OMD 23 AWU 7 AWU 0 AWU 5 22 AWU 4 AWU 3 AWU 2 21 AWU 1 AWU 0 OMD 20 AWTLD AWU 0 OMD 18 BOY 1 BOY 0 BOY 0 18 BOY 7 BOY 0 BOY 0 18 BOY 7 BOY 0 BOY 5 15 BOY 1 BOY 0 OMO 16 BOY 7 BOY 0 BOY 5 17 BOY 7 BOY 0 BOY 0 18 BOY 1 BOY 0 OMD 19 BOY 1 BOY 0 OMD 11 BOU 7 BOU 0 BOY 5 12 BOY 1 BOY 0 OMD 11 BOU 7 BOU 0 BOY 5 12 BOY 1 BOY 0 OMD 11 BOU 7 BOU 0 BOU 0 11 BOU 9 BOU 0 OMD 11 BOU 9 BOU 0 OMD 11 BOU 1 BOU 0 OMD 12 BOU 1 BOU 0 OMD 13 BOU 4 BOU 9 OMD 14 BOU 9 OMD 15 BOU 1 BOU 0 OMD 16 -12V -12V -12V -12V -12V -12V -12V -12V	CH 18  A B C  32 +6V +6V +6V +6V +6V  30 +6V +6V +5V +5V  20 +6V +5V +5V  20 22 27  20 22 22  21 20 22 22  21 20 21 20 20 16    18	CN 19  2

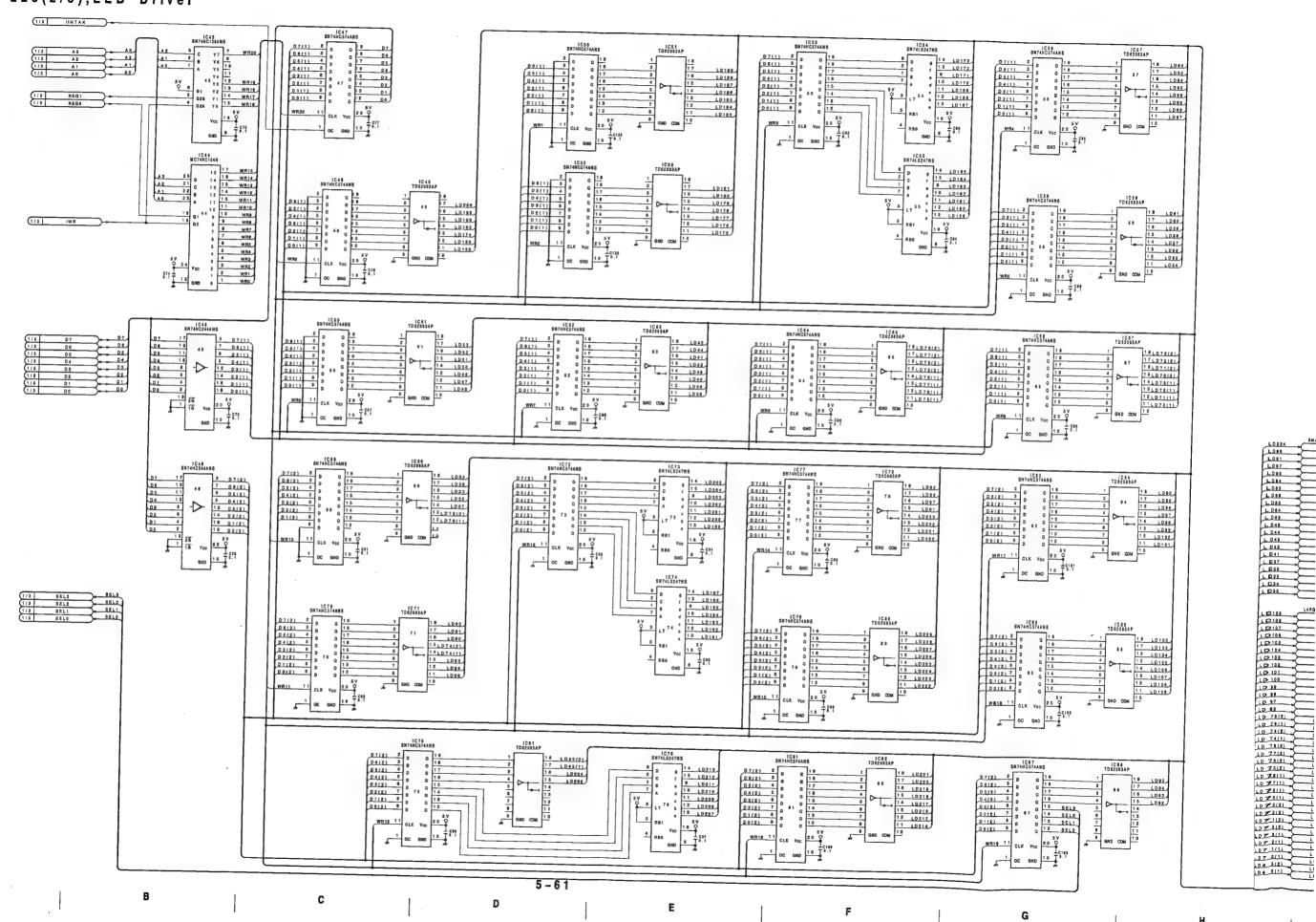
MB-385 BOARD BOARD NO.1-644-603-11 DFS-500 DFS-500P

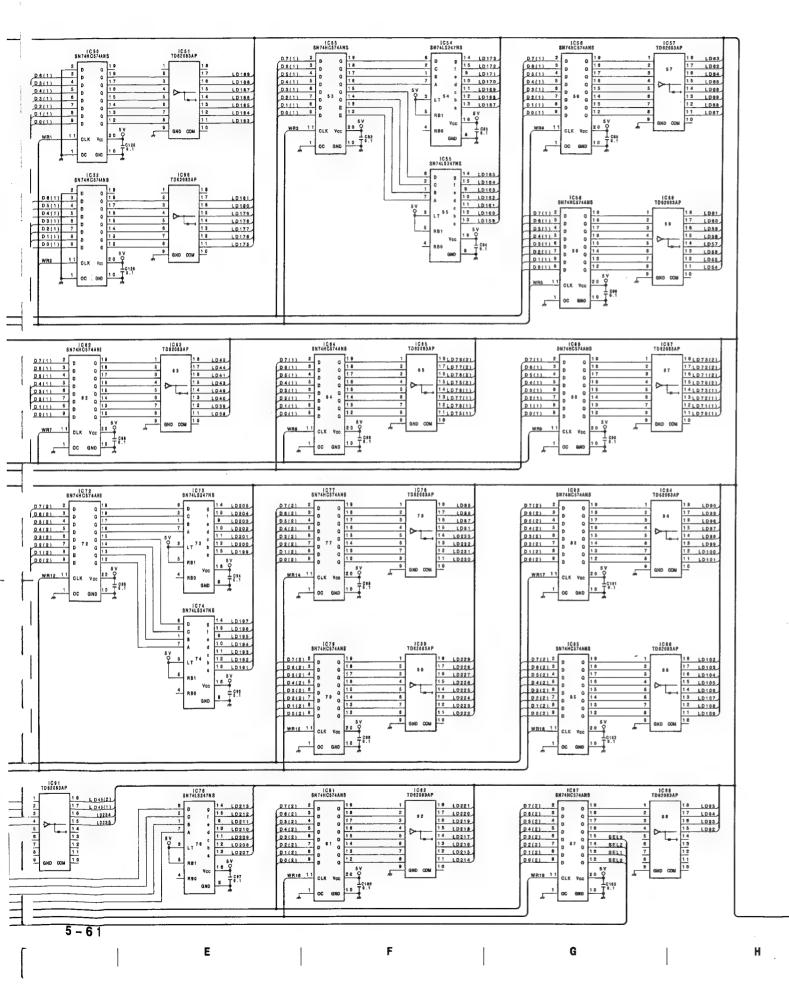
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#### KY-223(2/3); LED Driver



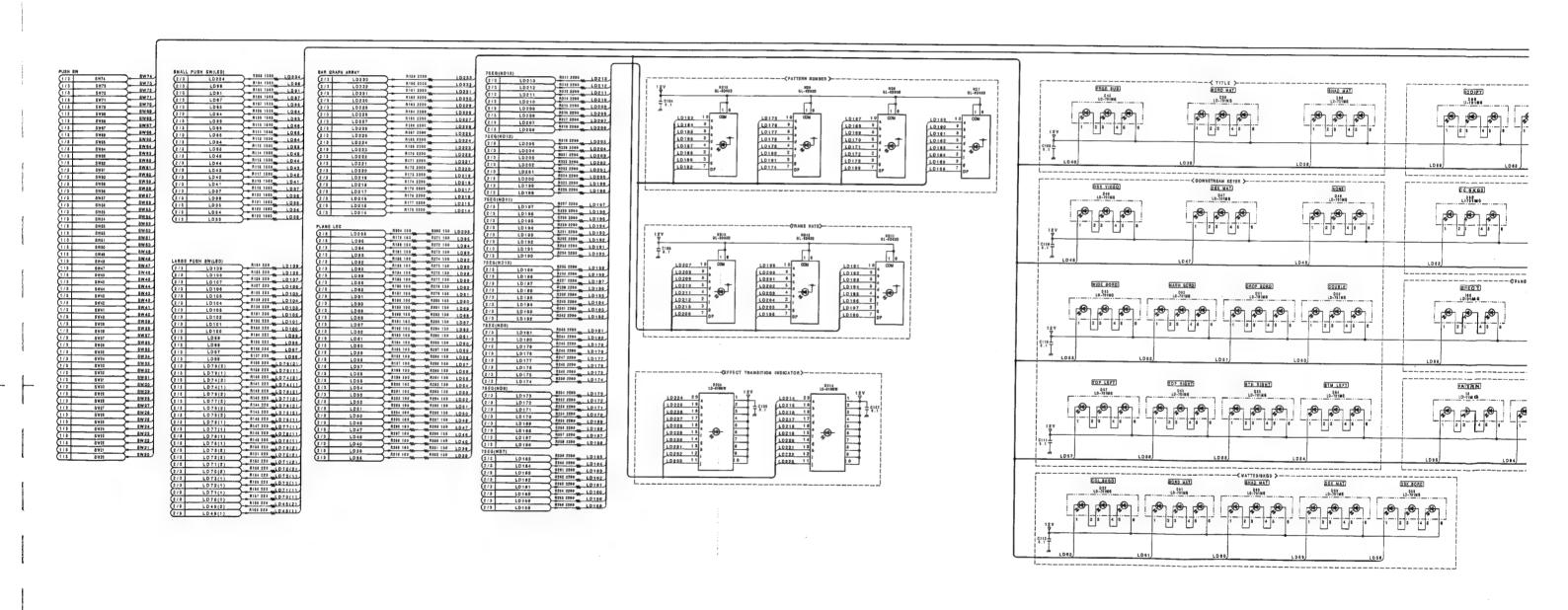


LD234 _	SMALL PUSH SWIL									
LD96	LD234	3/3)								
LD91	LD#6	3/3)								
LD87	LD#t	3/3								
LDas	LD87	3/3)	L0233 _/	BAR GRAPH ARRAY	<del>-</del>					
D84	LD85	3/3)	LD232	LD233	3/3					
LD83	L084	3/3)	LD231	LD232	3:3)					
D86	LD83	3/3)	LD230	LD231	3/3)					
065	LDSS	3/3)	LD229	LD230	3/3)					
84	LD66	3/3)	L0228	LD229	3/3)					
83	1.084	313)		LD228	3/3)					
48	LD63	313)	LD227	LD227	3/3)	•				
244	LD49	3/3)	LD226	FD558	3/3)					
	LD44	3/3)	LD225	LD225	313)					
D48	LD48	3/3)	LD224	LD224	3/3)					
	LD48	3/3)	TDSS3	L D 223	313)	78EG(ND10)				
141	LD41	3/3)	1D222	LD222	3/3)	LD189	3/3)			
37	LD37	3/3)	LD221	L0221	3/3	LD188	3/3)			
D36	LD38	2/3	FD550	LD220	3/3)	LD187 LD187	3/3)			
D35	LD35	3/3)	FD518	LD219	3/3)	1D186 LD188	3/3)			
034	LD34	3/3)	LOZIS	LD218	3/3)	LD185 LD185	3 ( 5 )			
D33 -C	LD38	3/3)	LD217	LD217	3/3)	LD184 LD184	3/3)			
_			LD216	LD216	3/3)	LD183 LD183	3/3			
	LARGE PUSH SW(L	ED)	LD215	LD216	3 (3)	LD182	3/3)			
D109 ~	LD109	313)	LD214	LD214	2/3		1070			
D108	LD108	3/3)	1 `		منت	1				
D107	LD107	3/3)		PLANE LED		i				
0.108	LD108	3/3)	10235	LD235	3/3)	7SEG(MD9)			75EG(ND13)	
0105	LD105	3/3)	LDSS	LD95	3/3)	LD181 LD181	313)	LD213	LD213	3/3
D104	LD104	3/3)	L084	LD94	3/3)	LD180 LD180	3/3	LD212		
103	LD103	3/3)	1093	LD93	3/3)	LD179 LD179		LD211	LD212	3/3
102	LD102	3/3)	LD02	LD92	3/3)	LD178 LD178	3/3	LD210	LD211	3/3
101	LD161	3/3)	LD80	FD90	3/3	L0177 LD177	3/3	TD500	LD210	3/3
100	LD100	3/3	LD88	LD88	3/3	LD176 LD178		LD208	L D 2 0 B	3/3
99	LD99	3/3	LD86	LD86	3/3	LD176	3/3)	LD207	FD508	3/3
D98	LD98	3/3	LD82	LD82	13/3	LD175	313)	LD208	L D 2 0 7	3/3
097	LD97	3/3	LD81	LD82		L0174	3/3)	-	T D S D B	3/3
089	LD89	3/3	LDsp		3/3					
D79(2)		3/3	LD69	LD80	3/3	1		1		
D79(1)	LD79(2)	113	LDes	LD89	3/3	**********				
D74(2)		3/3	LD87	LDes	3/3	10173 7SEG(NDE)		LD205	78EG (ND12)	
074(1)	LD74(2)		LD82	LD87	3/3	LD173	12/3	LD204	LD205	3/3
7.8(2)	LD74(1)	3/3	LD81	LD62	313)	LD171	3/3		LD204	3/3
077(2)	LD78(2)	3/3	LDeo	LD61	313	LD171	3/3	LD203	FD503	3/3
78(2)	LD77(2)	3/3	LD59	LD60	3/3)	20170	3/3	LD202	LD202	3/3
D75(2)	LD78(2)	3/3	1.058	LD50	3/3)	LDIES	3/3	LD201	LD201	3 / 3
D78(1)	LD75(2)	3/3)	LD57	LD58	313)	LD186	3/3	LDZQQ	LD200	3/3)
D77(1) -	LD78(1)	3/3	LOS8	LD57	3/3)	LD166 LD187	3/3)	LD199	LD198	3/3)
D78(1)	[077(1)	3/3)		LD56	3 / 3	LD188	3/3)	LD198	LD198	3/3)
D75(1)	LD76(1)	3/3)	LD55	LDS5	3/3)			1		
D73(2)	LD75(1)	3/3		LD54	3/3			1		
	LD73(2)	3/3)	LD53	LD53	3/3)	1				
072(2)	LD72(2)	3/3	LD52 C	LD52	3/3)	75EG(ND7)			78 E G (N D 1 1)	
D71(2)	LD71(2)	3/3)	LD51	LD51	3/3)	LD165 LD165	3/3)	LD 19.7	LD197	3/3)
D79(2)	LD70(2)	3/3	LD50	LDSO	3/3)	LD184 LD164	3/3)	LD198	LD196	3/3)
D73(1)	LD73(1)	3/3)	LD48 -C	LD48	3/3)	LD183 LD183	(3/3)	LD195	LD195	3/3
D72(1)	LD72(1)	3/3)	LD47	LD47	3/3)	LD182 LD182	3/3	LD194	LD194	3/3
D71(1) -C	LD71(1)	3/3)	LD46	LD48	3/3)	LD161 LD161	3/3	LD193	LD193	3/3
D70(1)	LD70(1)	313)	LD40 -	LD40	3/3)	LD180 LD180	3/3	LD192	LD193	3/3
D45(2)	LD45(2)	3/3)	LD39	LD39	3/3)	LD159	3/3	LD191	LD191	3/3
.D45(1) -	LD45(1)	3/3)	LD38	LD38	3/3	LD158 LD158	13/3	LD180	LD190	
		ريني	1		الشنت	20158	13/3	1	LD190	3/3
	_							,		

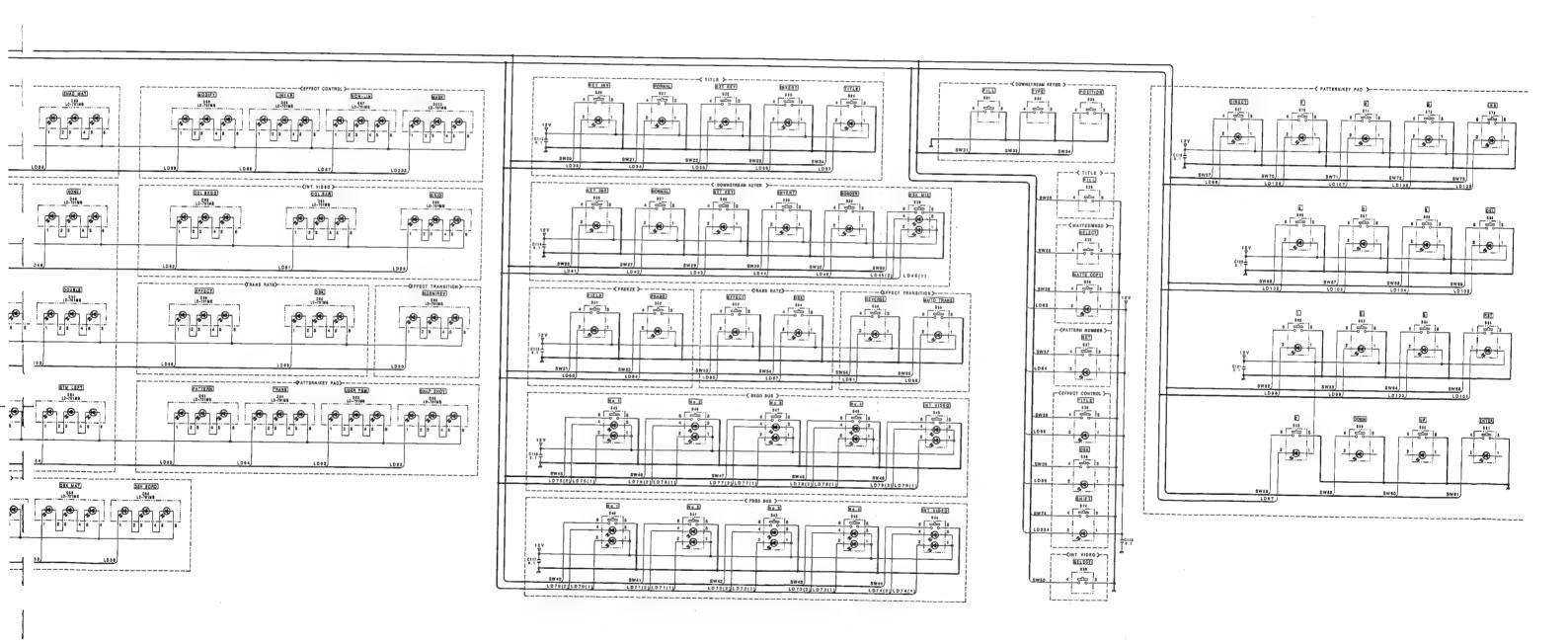
KY-223(2/3) BOAF
BOARD NO.1-644-604-11
DFS-500
DFS-500P

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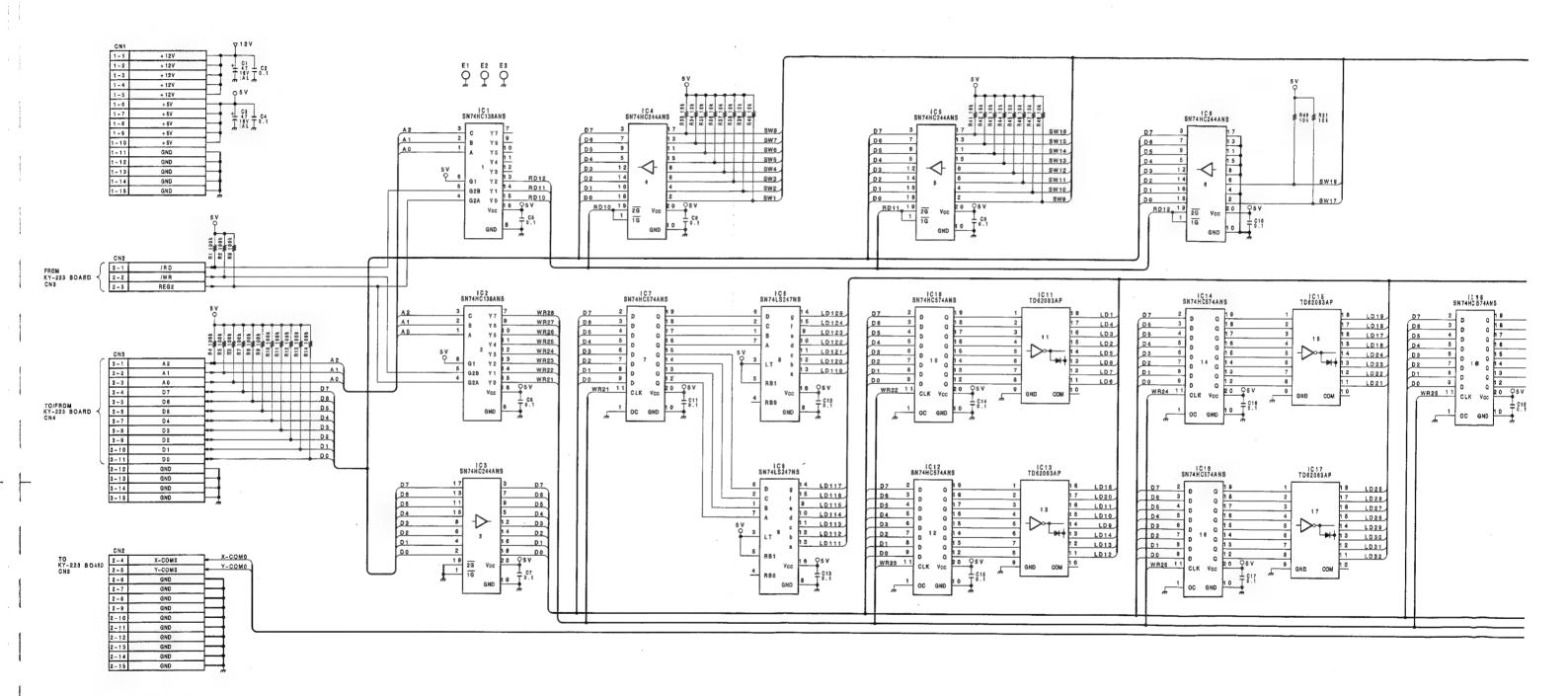
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KY-223(3/3) BOARD
BOARD NO.1-644-604-11 DFS-500 DFS-500P

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#### KY-225(1/2); LED Driver

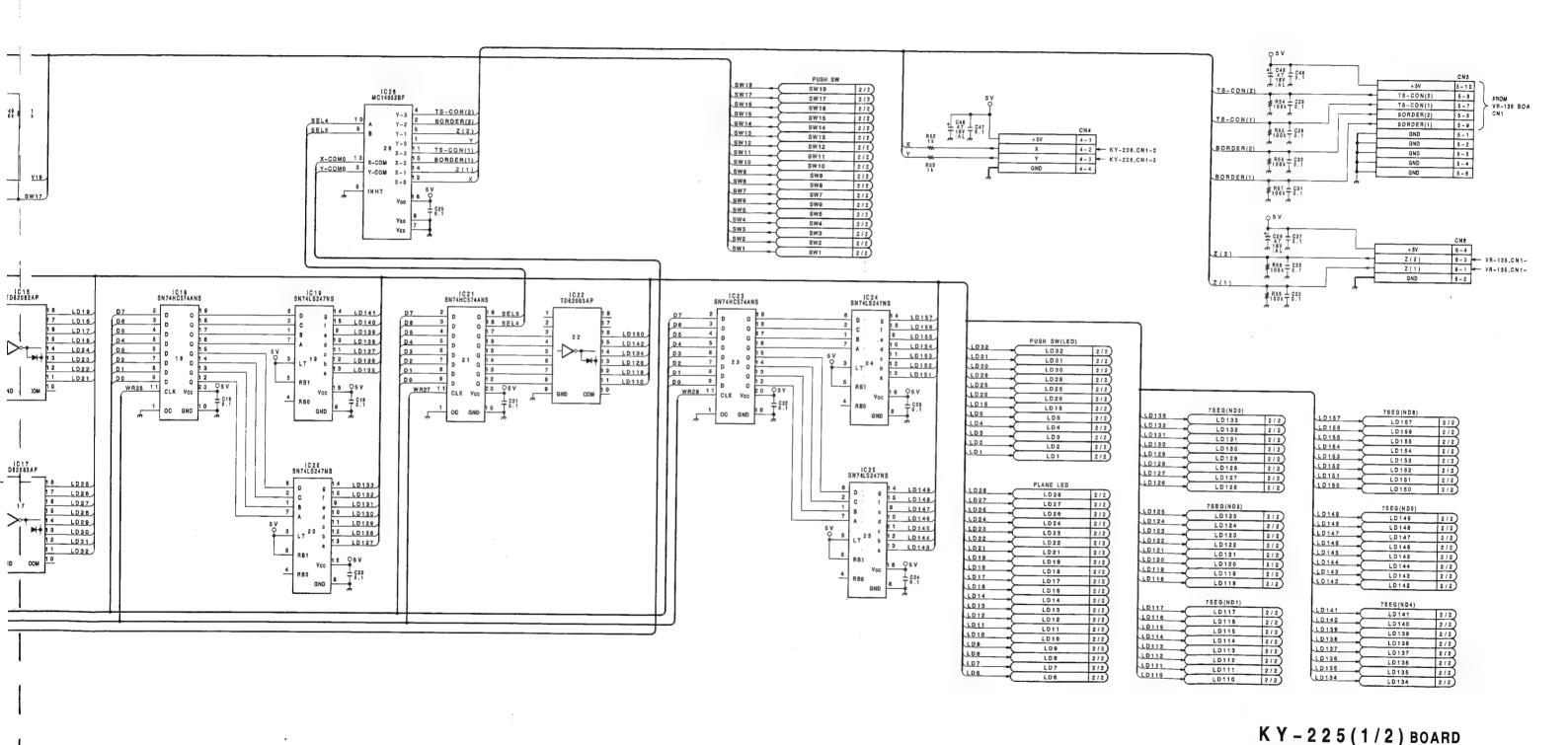


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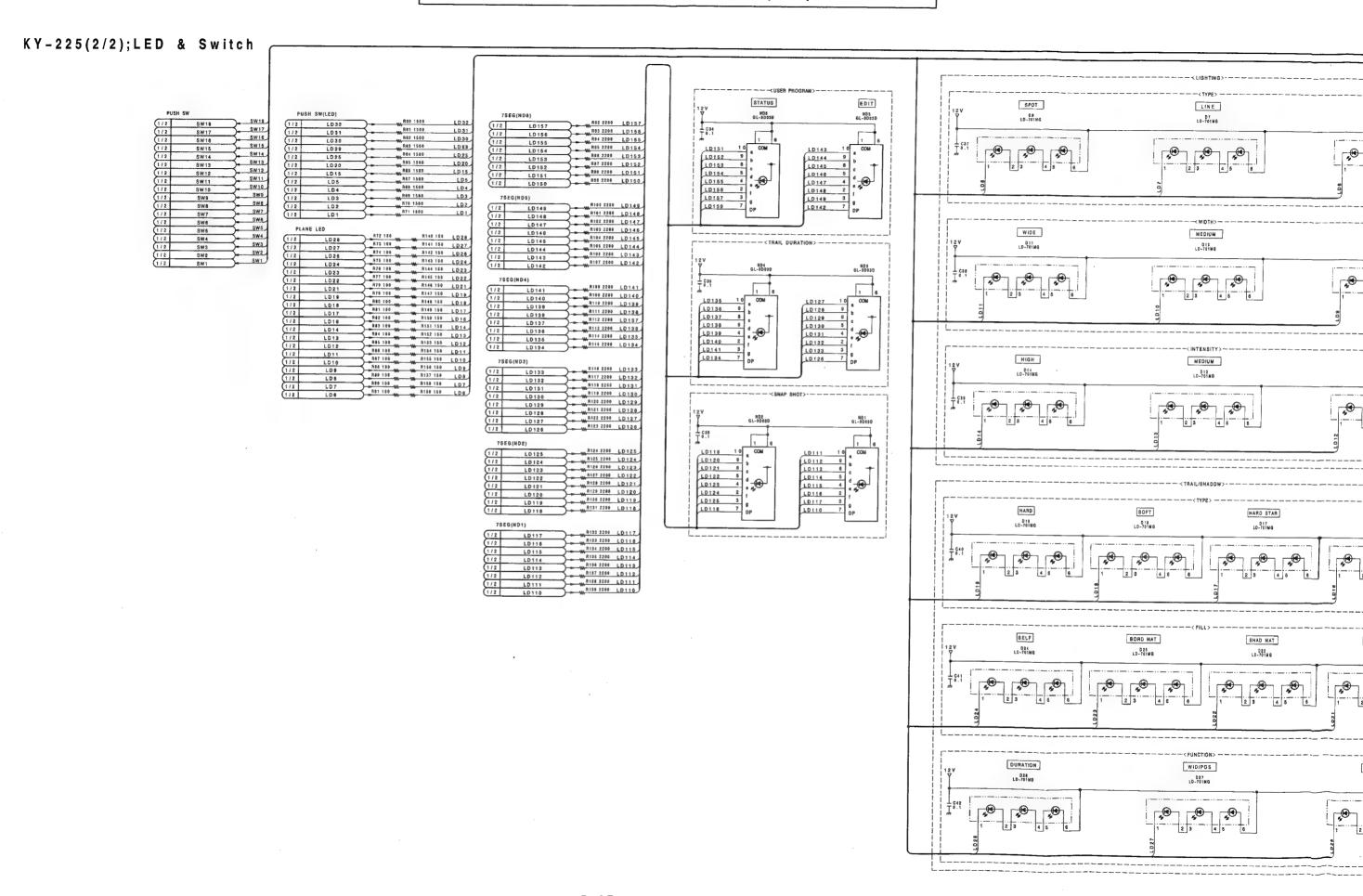
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BOARD NO.1-644-605-11

DFS-500P

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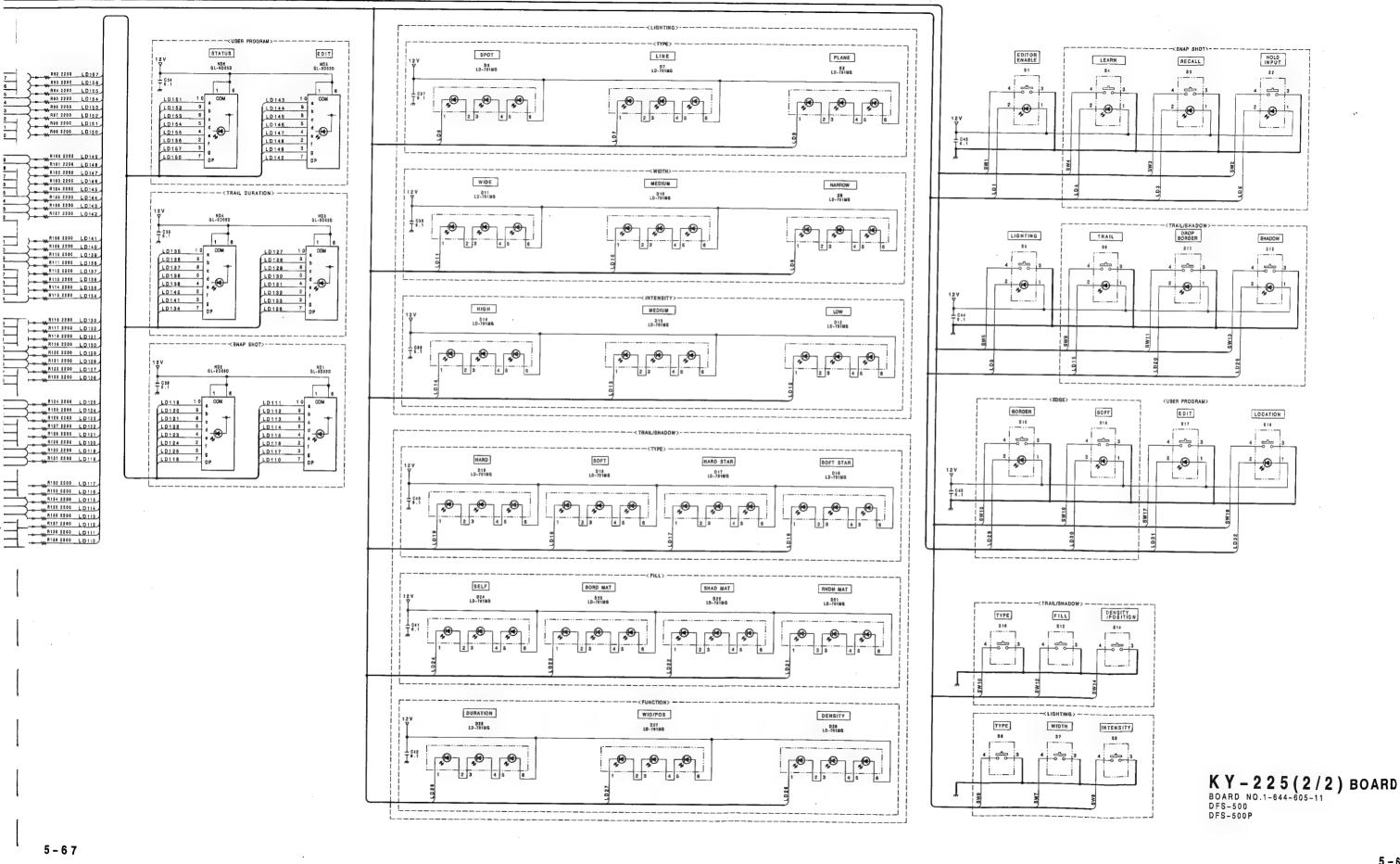


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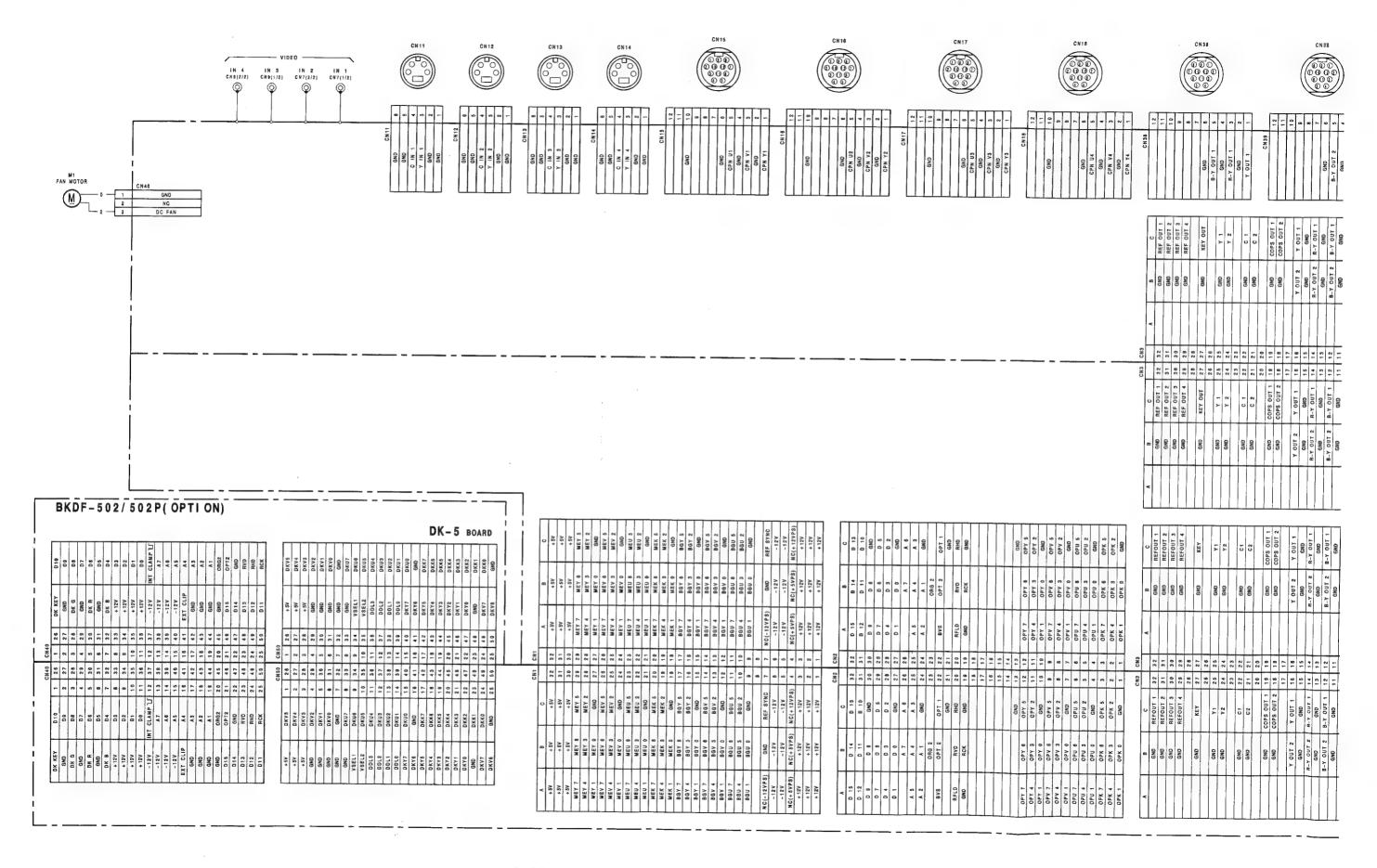
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## PROCESS UNIT FRAME WIRING(1/3) FRAME WIRING(1/3) PROCESS UNIT



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# PROCESS UNIT FRAME WIRING(1/3) FRAME WIRING(1/3) PROCESS UNIT

$\begin{pmatrix} \begin{pmatrix} 0 & 0 & 0 \\ 0 & 0 & 0 \end{pmatrix} \end{pmatrix} \qquad $	TO/FROM PROCESSOR UNIT  CN22  CN21  OUT 1 N34(1/2) CN27(1/2) CN27(1/2) CN25(1/2) CN25(	
1   1   1   1   1   1   1   1   1   1	AND   CN22   S   S   S   S   S   S   S   S   S	
B C C     GHD REF OUT 2     GHD REF OUT 3     GHD REF OUT 4     GHD REF OUT 4     GHD REF OUT 4     GHD REF OUT 4     GHD REF OUT 7     GHD COPS OUT 1     GHD COPS OUT 2     GHD COPS OUT 3     GHD COPS	A   B   C	
A B REF OUT 1 22 22 22 6ND REF OUT 2 2 2 2 2 6ND REF OUT 2 2 2 2 2 2 2 2 6ND REF OUT 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	CND 5 7 3 3 3 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	
B   C   C     GND	# 557  #	
SHO	B	
DA-63 BOARD	AWY 7  AWY 7  AWY 7  AWY 4  AWY 7  AWY 4  AWY 7  AWY 4  AWY 7  AWY 1  AWY 7  AWY 1  AWY 7  AWY 1  AWY 7  AWY 1  AWY 1  AWY 1  AWY 7  AWY 1  AW	RAME WIRING(

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BKDF-501/501P( OPTI ON)		VE-25 BOARD		
1				
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CEF 8 CEF 8 CEF 8 CEF 9 CEF 9 COPY 2 COPY 2 COPY 2 COPY 2 COPY 2 COPY 3 COPY 2 COPY 3 COPY 4 COPY 5 COPY 5 COPY 5 COPY 6 COPY 7 COPY 6	0 1 1 1 0 1 1 1 0 1	0 + 58V + 6V +	C CEFF 6 CEFF 7
# 45W + 45W	CEF 4   CEF 6   CEF	8 D 14 D 1	# 69	B CEF 9 CEF 6 CEF 6 CEF 1 CEF
CB4  A  2	20 000 000 000 000 000 000 000 000 000	CN6  A 13 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1	A CEF 7 CRID CRID CRID CRID CRID CRID CRID CRID
CN 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	9 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	A C O O O O O O O O O O O O O O O O O O	CM7	ON S C C C C C C C C C C C C C C C C C C
C C C C C C C C C C C C C C C C C C C	CEF 6  CEF 7  CE	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C +8V	
B	B   CEF   9	B   D   14   D   14   D   14   D   14   D   15   D   16	-12 V -13 V	B   CEF   9
A + 59V	GHO	A 1 15 D 1 15 D 1 1 1 1 1 1 1 1 1 1 1 1 1	A + 5V + 5V + 5V + 6V MEY 7 MEY 1 MEY 1 MEY 7 MEY 1 MEY 7 MEY 7 MEY 7 MEY 7 MEY 7 MEY 7 MEY 7 MEY 7 MEY 1 MEY 7 MEY 7 ME	A A GND CEF 7 GND CEF 7 CEF 7 CEF 8 PER 9 PA 315 PA 315 PA 304 PA 307 PA
PL 21 PL 21 PL 12 PL	CEF 6 CEF 7 CEF 7 CEF 7 CEF 7 CEF 7 CEF 9 CEF 7 CEF 9 CEF 9 CEF 9 CEF 9 CEF 10 CEF 10 CE	D 13 D 19 D 5 D 6 D 7 D 6 D 7 D 7 D 6 D 7 D 7 D 7 D 7 D 7 D 7 D 7 D 7 D 7 D 7	C C +5V  +5V  +8V  AWY 2  OWD	C C GHD
+ 55V + 56V + 56V + 56V + 56V + 12V + 12V + 12V + 12V + 12V + 12V	B   C   E   F   C   E   F   C   E   F   C   E   F   C   E   F   C   E   F   C   E   F   C   E   E   C   E   E   C   E   E   E	D 14 D 14 D 15 D 15 D 16 D 16 D 17 D 17 D 18	# + 5V	GAID GAID GAID GAID GAID GAID GAID GAID
+89 +89 +89 +89 +89 +89 +89 -129 -129 -129 -129 -129 -129 -129 -129 -129 -129 -129 -129 -129	GND  CEF 7  GND  CEF 7  CEF 8  CEF 7  CEF 13  CEF 2  CEF 2  PA 312  PA 304  PA 107  PA	A A 13 A 10 B B A 10 B B A 10 B B B A 10 B B B A 10 B B B A 10 B B B B A 10 B B B B B B B B B B B B B B B B B B	4 9V 4 9V 4 9V 4 8V 4 8V 8 8V	A GNO
C N O O O O O O O O O O O O O O O O O O	N	O O O O O O O O O O O O O O O O O O O	7 0 7 0 0 7 0 0 7 0 0 0 7 0 0 0 7 0 0 0 0 7 0 0 0 0 7 0	7
PL 21 PL 21 PL 21 PL 21 PL 21 PL 22 OND TX 10 TX 2 OND -12V -12V +12V +12V +12V	CEFF 6 CEFF 3 CE	O O O O O O O O O O O O O O O O O O O	# 59V   3   4.5V   3	C C GNO 32 SWHD 39 SWHD 39 SWHD 39 SWHD 39 SWHD 39 SWHD 30 SWY 5 2 2 SWHV 6 2 3 SWHV 6 3 S
PL 22 +50/ +50/ +50/ +50/ +50/ TX 11 TX 11 TX 11 TX 10 TX 10	CEF 9  CEF 1  CE	MARANIN AND MARANI	# 6V	GNO GNO GNO BWY G BWY G
A + 8V + 8	ORO CEF 2 CE	A A B B A B B A B B A B B A B B B A B B B A B	A + 6V + 6V + 6V AWY 4 AWY 1 AWW 1 BE OV 7 BE OV 7	A GND BWFLD GND BWY 7 BWY 7 BWY 1 BWY 1 BWY 1 BWU 1 BWU 1 BWU 1 BWU 1 BWU 1

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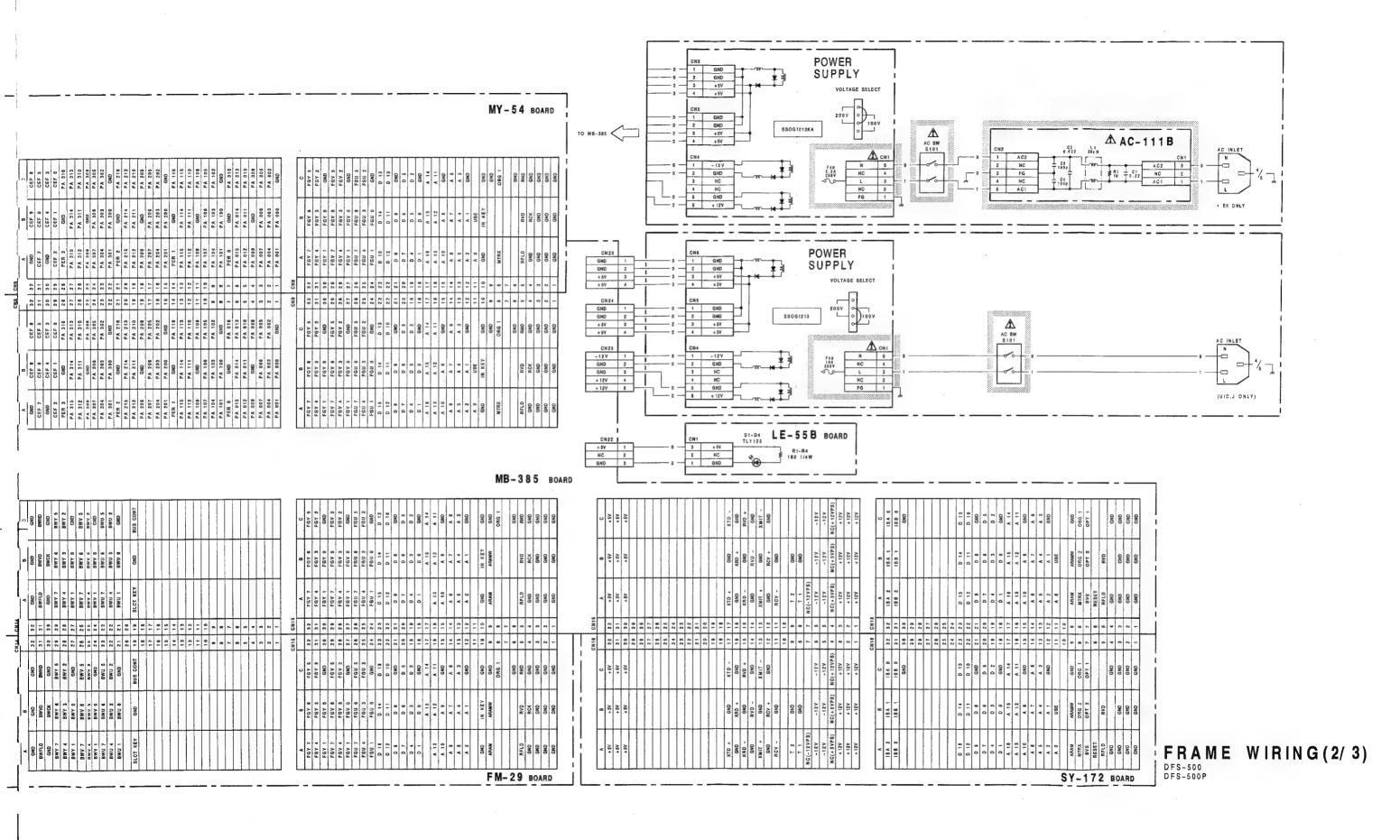
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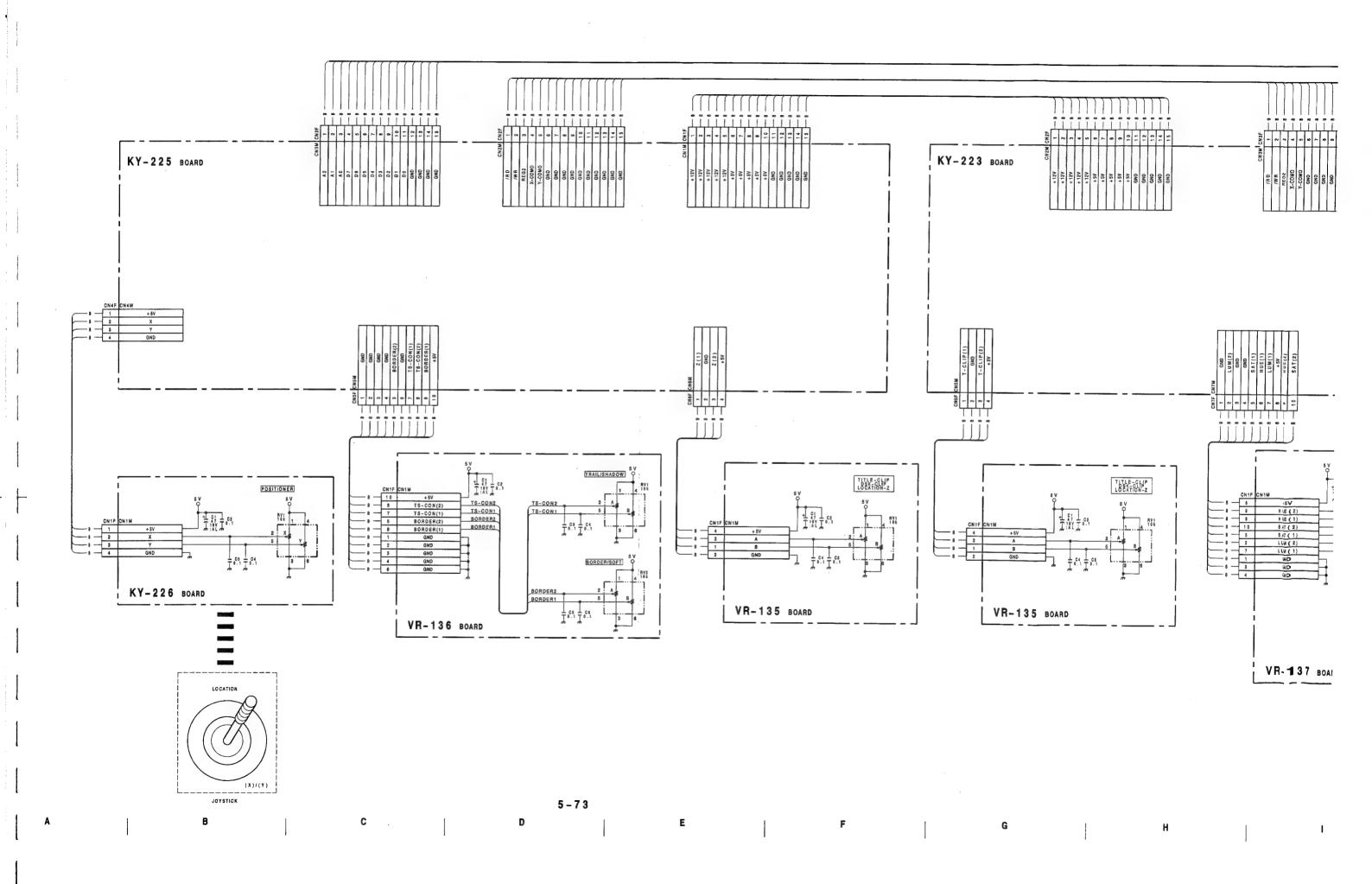
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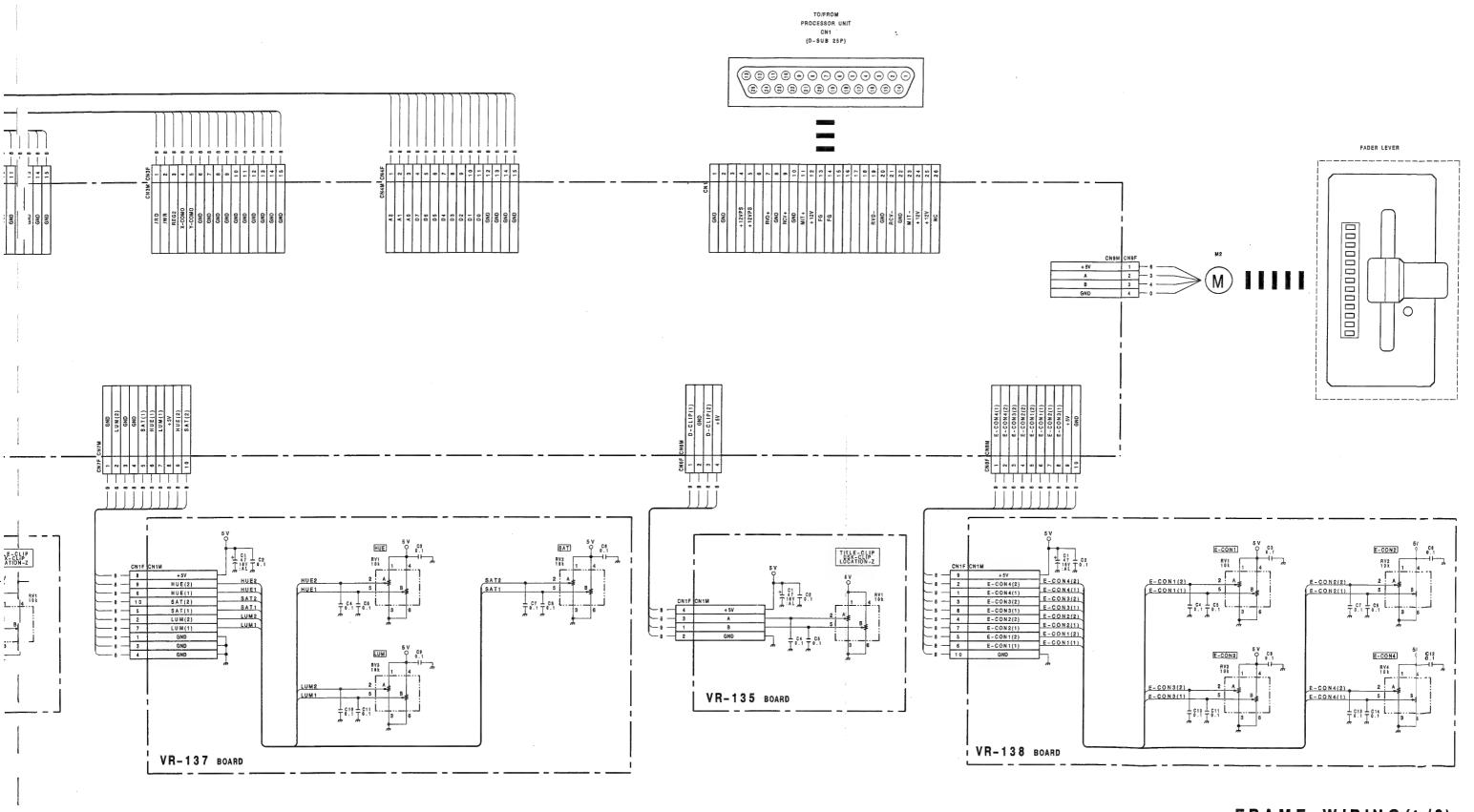


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### CONTROL PANEL FRAME WIRING(3/3) FRAME WIRING(3/3) CONTROL PANEL



FRAME WIRING (3/3)
DFS-500P

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# SECTION 6 BOARD LAYOUTS

	Board	Function Pa	g (
Α	AC-111(For EK)	Line Filter·····6-	2 :
	AD-76	A/D Converter6-	2
С	CN-573	Rear Panel Connector6-	14
D	DA-63	D/A Converter6-	10
F	FM-29	Frame Synchronizer6-	4
K	KY-223	Function Key·····6-	
	KY-225	Switch6-	20
	KY-226	Positioner6-	2 1
L	LE-55	Power Indicator6-	2 1
M	MB-385	Mother Board······6-	16
	M Y - 54	Field Memory·····6-	6
Р	PU-78	Address Operation ·····6-	8
S	SY-172	System Control6-	1 2
٧	VR-135	Location Control6-:	2 1
		Title Control	
		DSK(Down Stream Keyer) Control	
	VR-136	Edge/Trail/Shadow Control	2 1
	VR-137	Mattes/BKGD Control	2 1
	VR-138	Effect Control	2 1

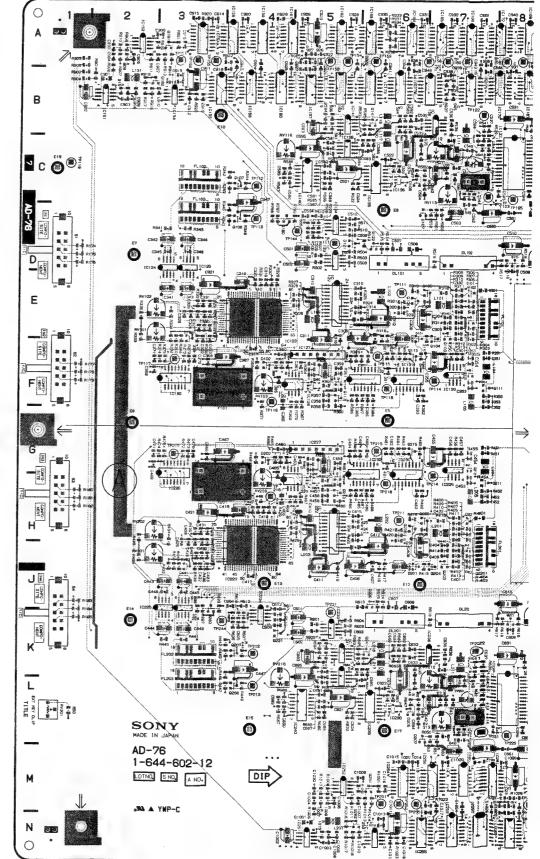
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AD-76(1-644-602-12)

	AD-	76;	A/D	Con	verter
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MD-101	1-044-0	002-12)													
CN 19	C-15	FL101	E - 8	IC143	C-12	IC228	H – 5	Q102	E - 7	Q215	G - 6	RV116	C 4	TD455	
CN 20	G-15	FL102	C - 3	IC144	B-12	IC229	H – 5	Q102	F - 7	Q215	K – 4	RV110	C – 4 D – 10	TP155 TP156	
CN 21	L – 15	FL103	C – 3	IC145	E-13	10223	H – 3	Q103	F – 7	Q221	J - 6	RV117	C-11	TP150	
ONZI	L-10	FL111	D - 9	IC146	D-13	IC231	G - 6	Q104	E – 7	Q223	K – 8	RV119	B-11	TP157	
CV101	C-7	FL112	C-9	IC147	C-13	IC232	G - 6	Q105	E - 6	Q223	K – 9	RV119			A – 8
CV101	L – 7	FL113	D - 9	IC147	D-13	IC232	K – 5	Q100	C - 4				D-12	TP159	A - 6
0 7 2 0 1	L - /	FL114	C-10	IC148	C-14	10233	J - 4			Q 2 2 5	K – 9	RV122		TP160	A – 7
DL101	E - 6	FL115	B-10	IC149	C-14	©IC234		Q108	D – 4	Q 2 3 1	L – 9	R V 123	B – 12	TP161	A – 8
DL101	D - 7	FL201	J - 8	IC150	B-2	©IC235	L-6	Q111	F - 7	Q 2 3 2	L-9	RV131	B - 8	TP162	
	D - 10	FL201	K – 3				L – 6	Q112	F – 7	Q 2 3 3	L-10	R V 201	J – 2	TP163	A – 9
DL103				IC152	A – 2	1C237	K – 8	Q113	F - 5	Q 2 3 4	L-10	RV202	H - 2	TP164	B-10
DL201	K-6	FL203	L - 3	IC153	B - 3	IC238	K – 7	Q114	F - 5	Q 2 3 5	M - 10	R V 2 0 3	H – 4	TP165	B – 1 0
DL202	J – 7	FL211	L - 9	IC154	A – 3	IC239	L – 5	Q115	F - 6	Q 2 3 6	L-10	RV211	J – 8	TP201	G – 10
DL203	K – 10	FL212	K – 9	IC155	B - 3	1 C 2 4 0	L – 5	Q121	D – 5	Q 2 3 7	K – 9	RV212	K – 7	TP202	G – 10
D101	г с	FL213	J - 9	IC156	A – 4	IC 2 4 1	K – 5	Q122	D - 6	Q 2 3 8	L – 9	R V 2 1 3	L – 7	TP203	G – 10
D101	E - 6	FL214	L-10	IC157	B - 5	IC242	K – 11	Q123	D - 8	Q239	K-10	R V 2 1 4	L-10	TP204	H – 10
D102	F – 4	FL215	K – 10	IC158	A – 4	IC243	L-12	Q124	E - 9	Q 2 4 0	L – 10	R V 2 1 5	K – 10	TP205	H – 10
D103	E – 3	104		IC159	B – 4	IC244	L-12	Q125	E - 9	Q 2 4 1	K – 6	RV216	K – 4	TP206	H – 10
D106	C – 6	I C 1	A – 13	IC160	B – 4	IC 2 4 5	K – 13	Q131	C - 9	Q 2 5 1	K – 10	R V 2 1 7	J – 1 1	TP211	H - 6
D107	D-6	I C 2	A - 12	IC161	A – 4	1 C 2 4 6	M – 13	Q132	C-9	Q 2 5 2	K – 10	RV218	L-11	TP212	K – 4
D111	D-12	I C 3	A – 12	IC162	A – 5	IC247	K – 13	Q 133	D – 1 0	Q 2 5 3	J – 11	R V 2 1 9	K – 1 1	TP213	L – 4
D112	D-12	I C 4	A – 11	IC163	B - 5	IC248	J – 13	Q134	C-10	Q 2 5 4	J-11	R V 2 2 1	J – 12	TP214	H – 7
D113	C-12	IC101	F – 13	IC164	A – 6	IC249	L – 13	Q135	D – 10	Q 2 5 5	L-11	R V 2 2 2	L – 1 2	TP215	G – 6
D121	A – 8	IC102	F-11	IC165	A – 7	IC250	K – 14	Q136	C - 9	Q 2 5 6	M – 11	R V 2 2 3	K – 12	TP216	H – 4
D122	B – 9	IC103	F-13	IC166	A – 7	IC 2 5 1	N – 5	Q137	B – 9	Q 2 5 7	M – 11	R V 2 3 1	N – 1 1	TP217	G – 3
D123	A – 10	IC104	F-11	IC167	B - 8	IC252	M – 5	Q138	C – 1 0	Q 2 5 8	K – 11	R V 3 0 1	L – 1	TP218	H – 6
D124	A – 9	IC105	F-13	IC168	A – 6	IC253	N – 6	Q139	C - 10	Q 2 5 9	L – 11	R V 3 0 2	H – 13	TP221	J – 5
D125	A – 10	IC106	F-11	IC169	A – 8	IC254	M – 6	Q140	C - 1 0	Q 2 6 0	L – 11			TP222	K – 7
D126	A – 10	IC107	E – 13	IC170	B – 8	IC255	N – 7	Q141	B – 6	Q 2 7 1	J – 12	S 1	D – 1	TP223	L – 8
D 2 0 1	J – 6	IC108	E-11	IC171	A – 7	IC256	M – 7	Q 151	D - 1 0	Q 2 7 2	J – 12	S 2	F – 1	TP224	L – 8
D202	G – 4	IC109	E - 13	IC172	A – 8	1 C 2 5 7	N – 8	Q152	D - 10	Q273	J – 12	S 3	H – 1	TP225	L – 8
D203	J – 3	IC110	E – 11	IC173	B – 6	IC258	M – 7	Q153	E-11	Q 2 7 4	L-12	S 4	J – 1	TP231	J – 11
D206	L-6	IC111	E – 13	IC174	B – 6	IC259	M – 7	Q 154	D – 11	Q 2 7 5	L – 12			TP232	L - 11
D207	L – 6	IC112	E – 11	IC175	B – 7	IC260	M – 7	Q 155	C-11	Q276	L – 12	TP101	F – 10	TP233	K – 11
D211	K – 12	IC113	J – 10	IC176	A – 9	IC 261	M – 8	Q 156	D – 11	Q277	K – 12	TP102	F – 10	TP241	J – 12
D212	M – 12	IC114	H – 9	IC177	A – 9	1 C 2 6 2	M – 8	Q157	D-11	Q278	K – 12	TP103	F-10	TP242	L - 12
D213	L – 12	IC115	H – 9	IC178	B – 10	IC263	M – 8	Q158	C – 1 1	Q 2 7 9	K – 12	TP104	E-10	TP243	K – 13
D221	M – 11	IC116	G – 9	IC179	A – 10	IC264	M – 9	Q159	C-11	Q 2 8 0	K – 3	TP105	E – 10	TP244	K – 4
D222	N – 13	IC117	G – 9	IC201	F-13	IC265	M – 10	Q160	C-11	Q 2 9 1	M – 6	TP106	E - 10	TP251	M – 6
D223	M – 13	IC118	F – 9	IC202	G-11	IC266	M - 10	Q171	D – 12	Q 2 9 2	M – 6	TP111	E – 6	TP252	M – 6
D224	M ~ 13	IC119	E – 9	IC203	G – 13	IC267	N – 11	Q172	D – 12	Q 2 9 3	M - 13	TP112	C – 4	TP253	M – 8
D225	M – 13	IC120	E – 9	IC204	G-11	IC268	M – 9	Q173	D – 12	Q301	J – 14	TP113	D – 4	TP254	M-8
D226	M – 13	IC121	F - 8	1 C 2 0 5	G – 13	IC269	M – 11	Q174	C-12	Q302	H – 14	TP114	F – 7	TP255	M – 6
D301	J – 13	IC122	E – 5	1 C 2 0 6	G – 11	IC270	N – 1 1	Q 175	C – 1 2	Q303	J – 13	TP115	F – 6	TP256	M – 10
		IC123		IC207		IC271		Q 176	C-12	Q304	J – 13	TP116		TP257	M – 10
E1	E – 9	IC124	D – 2	IC208	G-11	IC272	M - 10	Q 177	B – 12	Q305	J – 13	TP117	F – 2	TP258	M – 11
E 2	J – 10	IC125	D - 3	IC209	H – 13	1C273	M-9	Q 178	B-12	Q306	H – 13	TP118	F ~ 6	TP259	M-9
E 3	H – 8	IC126	F-7	IC210	H-11	IC274	M – 9	Q 179	B – 12	Q307	J – 12	TP119	C – 1	TP260	M – 10
E 4	G – 14	IC127	F – 5	I C 2 1 1	H-13	IC275	N – 10	Q 180	D – 4			TP121	D - 5	TP261	M = 1.1
E 5	F – 6	IC128	F – 5	I C 2 1 2	H-11	IC276	M – 12	Q 191	A – 3	RB1	D – 14	TP122	B – 7	TP262	M - 12
E 6	G – 2	IC129	F – 4	I C 2 1 3	J – 9	IC277	M - 12	Q192	B – 3	RB2	C-14	TP123	D – 8	TP263	M - 13
E7	D – 2	IC130	F – 3	I C 2 1 4	H – 9	IC278	N – 14	Q 193	A ~ 10	RB3	C-14	TP124	C-8	TP264	N - 13
E 8	D – 6	IC131	F - 6	IC215	H - 9	IC279	M – 14	Q 201	J – 7	RB101	K – 14	TP125	D – 8	TP265	N - 13
E 9	C – 13	IC132	F – 6	IC216	G – 9	1 C 3 O 1	J - 12	Q 2 0 2	H – 7	RB102	L-14	TP131	D-11	TP301	H-14
E10	B - 3	IC133	D – 5	IC217	G – 9	IC302	J – 11	Q 2 0 3	J – 7	RB103	K – 14	TP132	C-11	TP302	J – 13
E11	B – 8	IC134	D – 5	IC218	F – 9			Q 2 0 4	J – 7			TP133	B – 11	TP303	H – 12
E 12	J – 6	© I C 1 3 5	C – 6	IC219	E – 9	LV101	B – 10	Q 205	H – 7	R V 1 0 1	E - 2	TP141	D-13		
E13	J – 4	©IC136	C - 6	I C 2 2 0	E - 9	L V 2 0 1	N – 13	Q 2 0 6	H – 6	RV102	E – 2	TP142	C-12	X 1 0 1	G – 4
E 14	K – 2	IC137	B – 8	I C 2 2 2	H – 5			Q 207	K – 4	R V 103	F – 4	TP143	B – 12	X 1 0 2	C - 7
E15	L - 4	IC138	B – 7	IC223	J - 4	PS1	B – 14	Q 2 0 8	L – 4	RV111	D – 8	TP144	D - 4	X 2 0 1	H – 4
E16	L-13	IC139	C - 5	IC224	K – 3	PS2	B – 14	Q211	H - 8	R V 112	C-7	TP151	A - 3	X 2 0 2	L - 7
E17	L - 6	IC140	C – 5	1 C 2 2 5	J - 2	PS3	E – 14	Q 2 1 2	G - 7	RV113	C - 7	TP152			
E18	M – 9	IC141	B - 5	1 C 2 2 6	H – 7			Q 2 1 3	H – 5	RV114	C-10	TP153	A – 5	⊚:EK O	NLY
E19	C – 1	IC142	D – 12	10227	G – 5	Q101	E - 7	Q 2 1 4	H – 5	RV115	B – 10	TP154	A - 5		



#### AD-76:A/D Converter

TP155

TP157

TP159

TP161

TP162

TP163

TP164

TP165

TP201

TP202

TP203

TP204

TP205

TP206

TP212

TP213

TP216

TP218

TP221

TP222

TP223

TP225

TP231

TP232

TP241

TP244

TP251

TP252

TP254

TP255

TP256

TP257 TP258

TP259

TP260

TP261

TP262

TP263

TP265

TP301

TP303

X 1 0 1

X102

X 2 0 2

X 2 0 1

@:EK ONLY

TP264

TP253

TP217

TP215 G-6

TP224 L-8

TP211

B - 7

A – 6

A – 8

A – 8

A = 9

H - 6

K – 4

H - 4

G - 3

H-6

K – 7

J – 5

L - 8

L – 8

M-6

M - 6

M - 8

M-8

M-6

C-7

L - 7

1. – 4

RV116 C-4

RV117 D-10

RV122 C-12

RV123 B-12

RV131 B-8

RV201 J-2

RV202 H-2

RV203 H-4

RV211 J-8

RV212 K-7

RV213 L-7

RV214 L-10

RV215 K-10

BV216 K-4

RV217 J-11

RV218 L-11

RV219 K-11 RV221 J-12

RV222 L-12 R V 2 2 3

RV231 N-11

RV301 L-1

RV302 H-13

TP101 F-10

TP102 F-10

TP103 F-10

TP104 E-10

TP105 E-10 TP106

TP111 E-6

TP112 C-4

TP113 D-4

TP114 F-7

TP115 F-6

TP116 G-4

TP117 F-2

TP118 F-6

TP119 C-1

TP121 D-5 TP122 B-7

TP123 D-8 TP124 C-8

TP125 D-8

TP131 D-11

TP132 C-11

TP133 B-11

TP141 D-13

TP142 C-12

TP143 B-12

TP144 D-4

TP151 A-3

TP152 A-3

TP153 A-5 TP154 A-5

S 3

S 4

F-1

H – 1

J - 1

E-10

C-11

B-11

D-12

RV118

RV119

R V 121

Q215

Q221

Q222

Q223 Q224

Q225

Q 2 3 1

0232

Q233

Q234

Q235

Q236

Q237

Q 2 3 8

Q239

Q240

Q 2 4 1

Q 2 5 1

Q252

Q253

Q254

Q 2 5 5

Q256

Q257

Q258

Q259

Q260

Q271

Q272

Q273

Q275

Q276

0277

Q278

Q279

Q280

Q291

Q292

Q293

Q301

Q302

Q303

Q304

Q305

Q306

Q307

RB1

RB2

RB3

RB101

RB102

RB103

BV101

RV102

RV103 RV111

RV112

RV113

RV114

G-6

K - 4

K-9

L = 9

L-10

L-10

M-10 L-10

K - 9 L - 9

K-10

L-10

K-10

J-11

J-11

L-11

M-11

M-11

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L-11

J-12

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L-12

L-12

K-12

K-12

K-12

K-3

M-6

M-6

J-14

H-14

J-13

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C-14

C-14

K-14

L-14

K-14

E-2

E-2

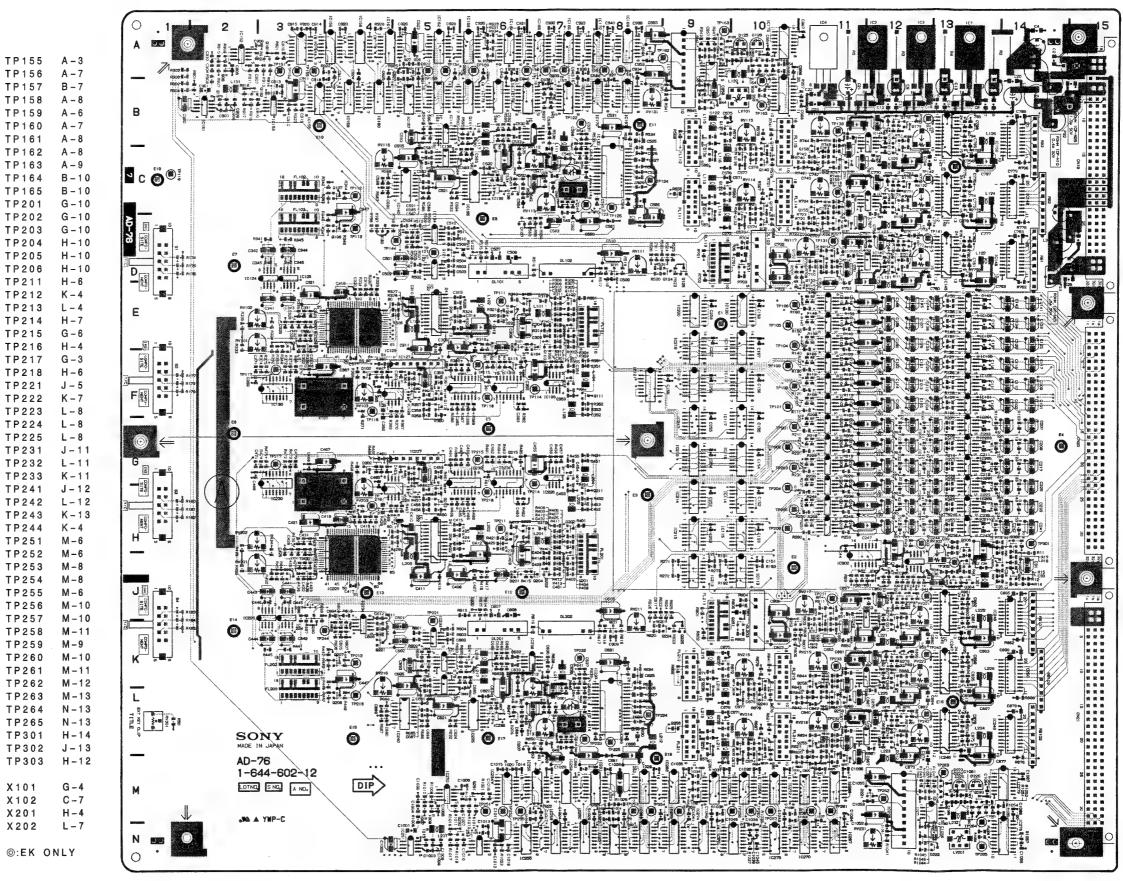
C-7

C-7

C-10

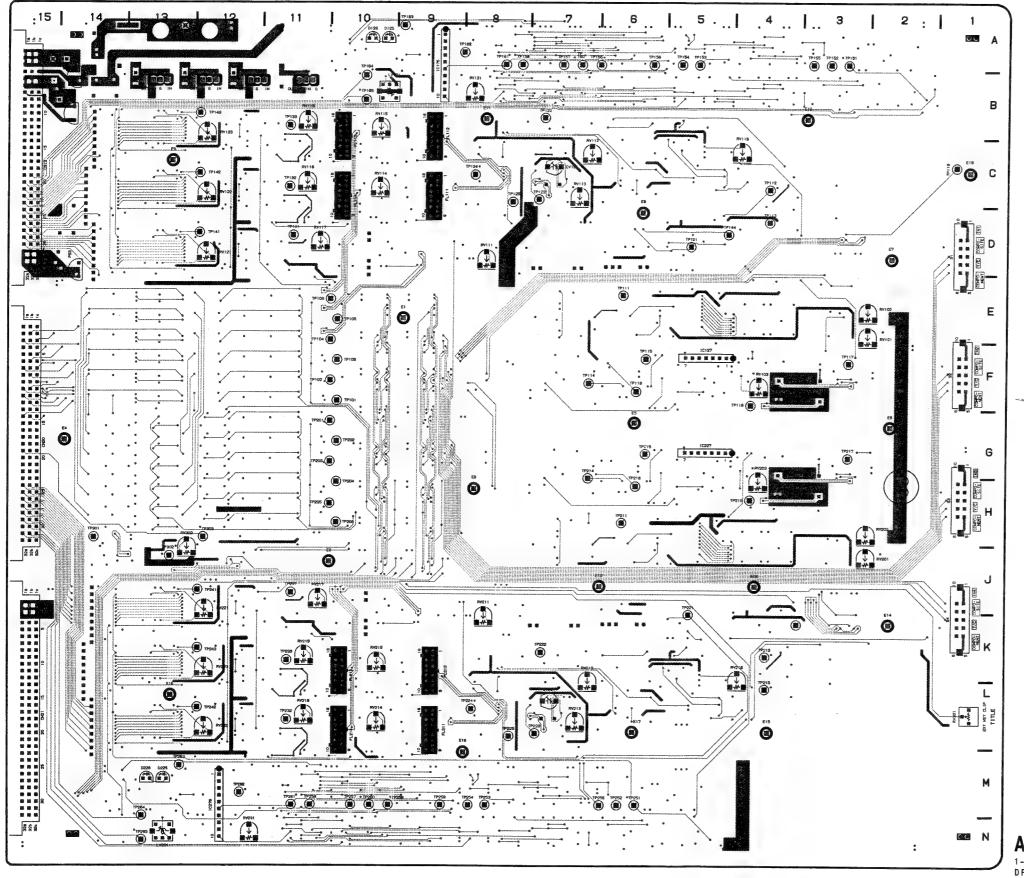
RV115 B-10

K - 6



AD-76 - A SIDE-1-644-602-11,12 DFS-500/500P

AD-76; A/D Converter



AD-76(1-644-602-12) CN19 C-15 FL101 E - 8 IC14 CN20 G-15 FL102 C-3 IC14 CN21 FL103 L-15 C - 3IC14 FL111 D - 9 IC14 CV101 C-7 FL112 C - 9 IC14 CV201 L-7 FL113 IC14 FL114 C-10 IC14: DL101 E - 6 FL115 B-10 IC151 DL102 FL201 J-8 D – 7 IC15 DL103 D-10 FL202 IC15: DL201 K – 6 FL203 L - 3 IC15: DL202 J – 7 FL211 L - 9 IC154 DL203 K-10 FL212 K ~ 9 IC15! FL213 J-9 IC15( D101 FL214 L-10 IC15 D102 F - 4 FL215 K – 10 IC151 D103 IC159 D106 C - 6I C 1 A - 13 IC16( D107 D - 6 IC2 A - 12IC16 D-12 D111 IC3 A - 12 IC162 D112 D-12 IC4 A - 11IC16: D113 C-12 F-13 IC101 IC164 D121 A - 8 IC102 F-11 IC165 F-13 D122 B - 9 IC103 IC16€ D123 A - 10 IC104 F - 11 IC167 D124 A - 9 IC105 F-13 IC168 D125 A - 10 IC106 F-11 IC165 D126 A - 10IC107 E-13 IC176 D 2 0 1 J - 6IC108 E-11 IC171 D202 G - 4 IC109 E - 13 IC172 D203 J - 3IC110 E-11 10178 D206 IC111 E-13 IC174 D207 L - 6 IC112 E-11 IC175 D211 K-12 IC113 J - 10 IC176 D212 M - 12IC114 H – 9 IC177 D 2 1 3 L-12 IC115 H - 9 IC178 D221 M - 11IC116 G – 9 IC179 D 2 2 2 N - 13IC117 G - 9 IC201 D223 M - 13IC118 F - 9 1C202 D224 M - 13IC119 IC203 D225 M - 13IC120 F - 9 IC204 D226 M - 13 IC121 F - 8 IC205 D301 IC122 E - 5 IC206 IC123 F – 4 IC207 E 1 E – 9 IC124 D - 2 IC208 E 2 J - 10IC125 D-3IC209 E 3 IC126 H – 8 F - 7 IC210 E 4 G-14 IC127 F-5 IC211 E 5 F - 6 IC128 F - 5 IC212 E 6 G-2 IC129 F – 4 10213 E 7 IC130 F - 3 IC214 E 8 D-6IC131 F - 6 IC215 E 9 C-13 IC132 F - 6 IC216 E 1 0 B - 3IC133 D - 5 IC217 E11 B - 8 IC134 D-5 IC218 E 12 J ~ 6 ©IC135 C - 6 IC219 E 13 J – 4 ©IC136 C-6 IC220 E14 K-2 IC137 B - 8 IC 2 2 2 E 15 L-4 IC138 B-7 IC 2 2 3 E 16 L-13 IC139 C-5 IC 2 2 4 E17 L-6 IC140 C - 5 IC 2 2 5 E18 M - 9IC141 B-5 IC 2 2 6

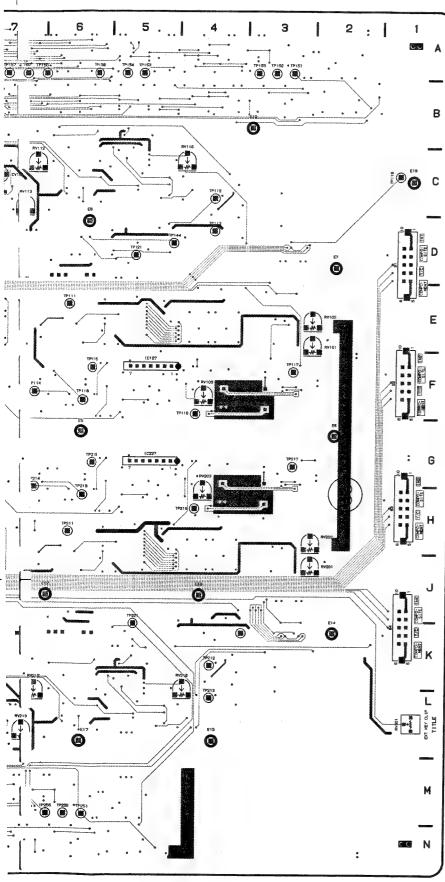
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E19

C-1

IC142 D-12

IC 2 2 7

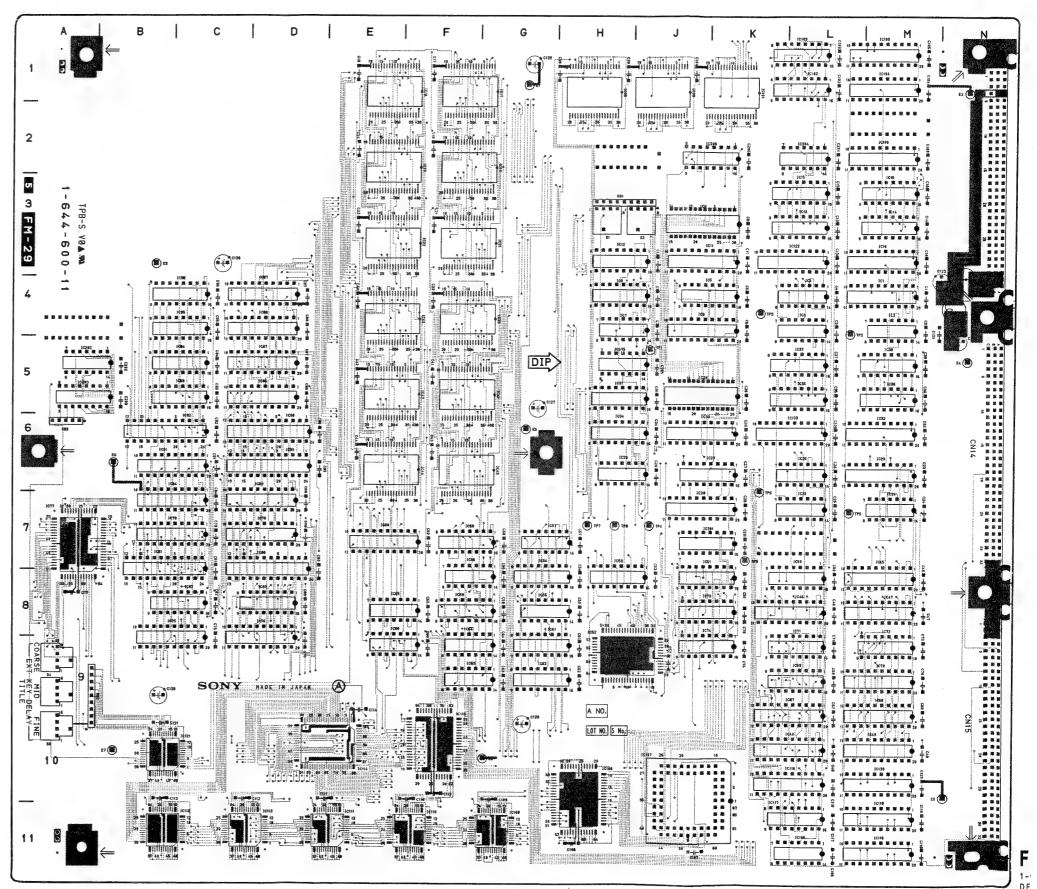


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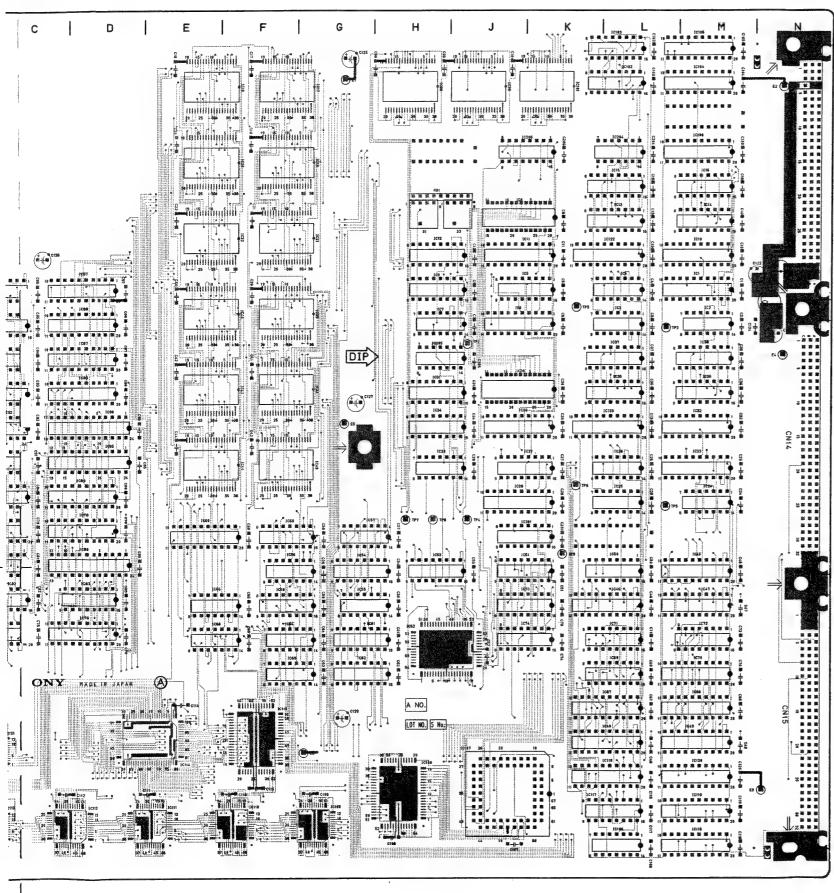
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CN19 CN20	C-15	FL101	E - 8	IC 1 4 3		I C 2 2 8		Q102	E - 7	Q 2 1 5	G 6	R V 1 1 6	3 C-4	TP155	5 A – 3
CN20	G-15 L-15	FL102 FL103	C – 3 C – 3	IC144 IC145		10229		Q103	F - 7	Q 2 2 1	K – 4	RV117		TP156	
		FL111	D – 9	IC145		IC 2 3 (		Q104	F - 7	Q222	J - 6	RV118		TP157	
CV101	C-7	FL112		IC147		IC 2 3 2		Q105 Q106	E – 7 E – 6	Q 2 2 3 Q 2 2 4	K – 8 K – 9	RV119		TP158	
CV201	L – 7	FL113	D – 9	IC148	D - 13	1 C 2 3 3		Q107	C-4	Q225	K – 9	R V 1 2 1 R V 1 2 2	_	TP159 TP160	
DL101	E &	FL114	C-10	IC149		10234		Q108	D ~ 4	Q231	L – 9	RV123	-	TP161	A – 7 A – 8
DL101	E – 6 D – 7	FL115 FL201	B ~ 1 0 J ~ 8	IC150 IC151		©1 C 2 3 5		Q111	F – 7	Q232	L - 9	R V 1 3 1		TP162	
DL103	D-10	FL202	K - 3	IC151		©1 C 2 3 6		Q 112 Q 113	F~7	Q233	L-10	R V 2 0 1		TP163	A – 9
DL201	K – 6	FL203	L - 3	IC153		IC238		Q113	F – 5 F – 5	Q 2 3 4 Q 2 3 5	L – 10 M – 10	R V 2 0 2		TP164	
DL202	J – 7	FL211	L - 9	IC154	A - 3	IC239		Q115	F - 6	Q236	L – 10	R V 2 0 3 R V 2 1 1		TP165 TP201	-
DL203	K-10	FL212	K – 9	IC155	B – 3	IC240		Q121	D – 5	Q237	K – 9	R V 2 1 2		TP201	G – 10 G – 10
D101	E – 6	FL213 FL214	J – 9 L – 10	IC156 IC157	A – 4	IC241	K - 5	Q122	D-6	Q238	L – 9	R V 213		TP203	G-10
D102	F – 4	FL215	K-10	IC157	B – 5 A – 4	I C 2 4 2 I C 2 4 3		Q 1 2 3 Q 1 2 4	D - 8	Q239	K-10	R V 2 1 4		TP204	H – 10
D103	E - 3			IC159	B ~ 4	1 C 2 4 4	L-12	Q124 Q125	E – 9 E – 9	Q 2 4 0 Q 2 4 1	L-10	R V 215		TP205	H – 10
D106	C - 6	I C 1	A – 13	IC160	B - 4	IC245	K-13	Q131	C-9	Q241 Q251	K – 6 K – 1 0	R V 2 1 6 R V 2 1 7	K – 4 J – 1 1	TP206	H-10
D107 D111	D ~ 6 D ~ 1 2	I C 2	A - 12	IC161	A – 4	IC246	M – 13	Q132	C-9	Q252	K - 10	R V 2 1 7	L-11	TP211 TP212	H – 6 K – 4
D112	D-12 D-12	I C 3 I C 4	A – 12 A – 11	IC162 IC163	A – 5 B – 5	10247	K-13	Q133	D-10	Q253	J - 1 1	R V 2 1 9	K-11	TP213	L – 4
D113	C-12	IC101	F-13	IC164	A – 6	I C 2 4 8 I C 2 4 9	J-13 L-13	Q 134 Q 135	C-10	Q 2 5 4	J – 11	R V 2 2 1	J – 12	TP214	H – 7
D121	A - 8	IC102	F-11	IC165	A – 7	1C250	K-14	Q 136	D-10 C-9	Q255 Q256	L-11	RV222	L-12	TP215	G - 6
D122	B – 9	IC103	F-13	IC166	A ~ 7	IC251	N - 5	Q137	B - 9	Q256 Q257	M – 1 1 M – 1 1	R V 2 2 3 R V 2 3 1	K – 12 N – 11	TP216	H – 4
D123 D124	A – 10 A – 9	IC104 IC105	F-11	IC167	B - 8	IC252	M - 5	Q138	C-10	Q258	K-11	R V 3 0 1	L-1	TP217 TP218	G – 3 H – 6
D125	A-10	IC105	F-13 F-11	IC168 IC169	A – 6 A – 8	IC253	N – 6	Q139	C-10	Q259	L – 1 1	R V 3 0 2	H-13	TP221	J – 5
D126	A-10	IC107	E-13	IC189	B – 8	1 C 2 5 4 1 C 2 5 5	M – 6 N – 7	Q140 Q141	C-10	Q260	L-11			TP222	K – 7
D 2 0 1	J – 6	IC108	E-11	IC171	A – 7	IC256	M – 7	Q151	B – 6 D – 1 0	Q271 Q272	J – 12 J – 12	S 1	D – 1	TP223	L – 8
D202	G – 4	IC109	E - 13	I C 1 7 2	A – 8	1C257	N – 8	Q152	D-10	Q272 Q273	J-12 J-12	S 2 S 3	F – 1 H – 1	TP224	L – 8
D203 D206	J – 3 L – 6	IC110 IC111	E-11	IC/173	B - 6	IC258	M – 7	Q153	E-11	Q274	L - 12	S 4	J – 1	TP225 TP231	L 8 J 1 1
D207	L – 6	IC111	E-13 E-11	IC 174 IC 175	B – 6 B – 7	IC259	M - 7	Q 1 5 4	D-11	Q275	L-12			TP232	L-11
D 2 1 1	K – 12	IC113	J – 10	IC176	A - 9	I C 2 6 0 I C 2 6 1	M – 7 M – 8	Q 155 Q 156	C-11	Q276	L-12	TP101	F – 10	TP233	K-11
D 2 1 2	M - 12	IC114	H - 9	IC177	A – 9	IC262	M – 8	Q 156	D-11 D-11	Q277 Q278	K – 12 K – 12	TP102	F-10	TP241	J – 12
D213	L-12	IC115	H – 9	IC178	B-10	IC263	M - 8	Q158	C-11	Q278 Q279	K-12 K-12	TP103 TP104	F – 1 0 E – 1 0	TP242	L-12
D 2 2 1 D 2 2 2	M – 11 N – 13	IC116 IC117	G – 9 G – 9	1C179	A – 10	IC264	M – 9	Q159	C-11	Q280	K-3	TP105	E-10	TP243 TP244	K – 13 K – 4
D223	M - 13	IC117	F - 9	I C 2 0 1 I C 2 0 2	F-13 G-11	IC265	M – 10	Q160	C-11	Q291	M - 6	TP106	E-10	TP251	M - 6
D224	M - 13	IC119	E - 9	IC203	G-13	IC 2 6 6 IC 2 6 7	M – 10 N – 11	Q 1 7 1 Q 1 7 2	D-12	Q292	M – 6	TP111	E - 6	TP252	M - 6
D 2 2 5	M – 13	IC120	E – 9	IC204	G-11	IC268	M - 9	Q172	D – 12 D – 12	Q293 Q301	M - 13 J - 14	TP112	C-4	TP253	M – 8
D226	M – 13	IC121	F - 8	IC205		IC269	M-11	Q174	C-12	Q301	3 - 1 4 H - 1 4	TP113 TP114	D – 4 F – 7	TP254	M – 8
D301	J – 1 3	I C 1 2 2 I C 1 2 3	E - 5 F - 4	1C206	G-11	IC270	N - 1 1	Q 175	C-12	Q303	J – 13	TP115	F-6	TP255 TP256	M – 6 M – 10
E 1	E - 9	IC124	D - 2	1C207 1C208	G – 13 G – 11	IC271 IC272	N - 9	Q 176	C-12	Q304	J – 13	TP116	G – 4	TP257	M-10
<b>E</b> 2	J-10	IC125	D – 3	IC 2 0 9	H-13	IC272	M - 10 M - 9	Q 177 Q 178	B-12 B-12	Q305	J-13	TP117	F – 2	TP258	M-11
E 3	H – 8	IC126	F – 7	IC210	H-11	IC274	M - 9	Q179	B-12	Q306 Q307	H – 13 J – 12	TP118	F-6	TP259	M-9
E 4 E 5	G-14	IC127	F – 5	IC211	H-13	IC275	N - 10	Q180	D ~ 4	4007	0-12	TP119 TP121	C – 1 D – 5	TP260 TP261	M-10
E 6	F – 6 G – 2	IC128 IC129	F – 5 F – 4	IC212 IC213	H-11	IC276	M-12	Q191	A – 3	RB1	D-14	TP122	B - 7	TP262	M – 1 1 M – 1 2
E 7	D – 2	IC130	F – 3	IC214	J – 9 H – 9	IC277 IC278	M 12 N 14	Q192	B-3	RB2	C-14	TP123	D – 8	TP263	M-13
E 8	D – 6	IC131	F ~ 6	IC215	H-9	IC279	M – 14	Q 193 Q 201	A – 1 0 J – 7	RB3	C-14	TP124	C – 8	TP264	N-13
E 9	C-13	IC132	F ~ 6	IC216	G – 9	IC301	J – 12	Q202	H – 7	R B 1 0 1 R B 1 0 2	K – 1 4 L – 1 4	TP125	D - 8	TP265	N-13
E10 E11	B – 3 B – 8	IC133	D-5	IC217	G-9	1 C 3 0 2	J – 11	Q203	J – 7	RB103	K-14	TP131 TP132	D – 1 1 C – 1 1	TP301 TP302	H-14
E12	J - 6	IC134 ©IC135	D – 5 C – 6	IC218 IC219	F - 9 E - 9	1.1/4.04	D 46	Q 2 0 4	J - 7		• •	TP133	B-11	TP302	J-13 H-12
E13	J - 4	©IC136	C-6	1C219	E-9 E-9	LV101 LV201	B – 10 N – 13	Q 2 0 5	H-7	R V 1 0 1	E - 2	TP141	D – 13	555	12
E 1 4	K - 2	IC137	B - 8	1C222	H-5	- V Z U	N - 13	Q 2 0 6 Q 2 0 7	H – 6 K – 4	R V 1 0 2	E-2	TP142	C - 1 2	X 1 0 1	G-4
E15	L - 4	IC138	B - 7	IC223	J - 4	PS1	B – 14	Q207	L – 4	R V 1 0 3 R V 1 1 1	F – 4 D – 8	TP143	B-12	X 1 0 2	C-7
E 1 6 E 1 7	L – 13 L – 6	IC139	C-5	IC224	K – 3	PS2	B-14	Q 2 1 1	H – 8	RV1112	C-7	TP144 TP151	D – 4 A – 3	X 2 0 1	H-4
E 1 8	L - 6 M - 9	IC140 IC141	C - 5 B - 5	IC225 IC226	J – 2	PS3	E – 14	Q 2 1 2	G-7	R V 1 1 3	C-7	TP152	A – 3 A – 3	X 2 0 2	L-7
E 1 9	C - 1	IC141		1C226	H - 7 G - 5	Q101	E 7	Q213	H – 5	RV114	C-10	TP153	A – 5	⊚:EK O	LY
				1	<u>.</u> .	QC T U S	E-7	Q 2 1 4	H – 5	RV115	B ~ 10	TP154	A - 5		-

FM-29; Frame Synchronizer

FM-29(	1 - 6 4 4 - 6	00-11)			
CN1107	J – 1 0	I C 4 1 I C 4 2	G – 5 F – 5	I C 9 7 I C 9 8	D – 4 H – 1
CN13	N - 2	IC 4 3	G – 6	IC99	J – 1
CN13	N – 6	I C 4 4	F-6	IC 100	M – 2
CN15	N - 9	I C 4 5	M – 7	IC101	K – 1
01170		I C 4 6	L – 8	IC102	L – 1
E 1	G – 1	IC 47	M – 8	IC103	L - 1
E 2	N – 1	IC48	L-10	IC104	M – 1
E 3	B - 3	IC 49	M - 10	IC105	M – 1
E 4	N – 5	IC50	L – 7	IC106	L-11
E 5	G – 6	IC51	K – 7	IC107	J – 10
E 6	B – 6	· I C 5 2	H – 8	IC108	H – 10
E 7	B – 1 0	I C 5 3	H ~ 7	IC109	G-11
E 8	G – 10	1 C 5 4	G – 7	IC110	F-11
E 9	M – 10	1C55	G - 8	IC111	E-11
101	M 4	IC 5 6	F - 7	10112	D-11
I C 1 I C 2	M – 4 M – 4	1 C 5 7 1 C 5 8	G – 7 F – 7	IC113 IC114	C-11 E-10
1 C 3	L – 4	IC 5 9	F – 8	IC115	F-9
I C 4	L - 4	IC 6 0	E - 7	IC116	M – 1 1
IC5	J – 4	IC 6 1	G-8	IC117	K-10
IC6	J – 4	IC62	G - 9	IC118	L-10
IC7	H – 4	IC63	F-9	IC119	M - 10
IC8	J – 3	IC64	F - 8	IC120	M – 10
IC9	H – 4	IC65	E – 8	IC121	C-10
IC 10	M - 3	I C 6 6	E - 8	IC122	L - 3
IC11	J – 3	IC 6 7	L - 9	IC123	L - 6
IC 12	H – 3 L – 3	IC 6 8	M – 9 L – 9	1 C 2 0 1 1 C 2 0 2	K – 7 A – 5
IC 13 IC 14	M-3	1 C 6 9 1 C 7 0	M – 9	IC 2 0 3	A - 5
IC15	L - 2	IC71	L – 8	IC204	L – 2
IC16	M - 2	I C 7 2	M - 8	IC205	H – 5
IC17	G-1	IC73	K – 8	IC206	K – 2
IC18	F – 1	IC74	K – 8		
IC19	G – 2	IC75	C – 8	PS1	N – 3
IC 20	F – 2	IC 7 6	D - 8		
I C 2 1	G – 3	IC77	A – 7	RB1	H-3
I C 2 2	F-3	IC78	D – 7	RB2	B – 9
1 C 2 3 1 C 2 4	M – 6 M – 6	1 C 7 9 1 C 8 0	C – 7 D – 7	RB3	A – 6
IC 2 5	L - 6	I C 8 1	B - 7	S 1	H-3
I C 2 6	L - 6	I C 8 2	C-8	S 2	J – 3
IC27	K - 6	IC83	D - 8	S 3	A - 10
I C 2 8	J – 6	IC84	C-7	S 4	A – 9
IC29	H – 6	IC85	D – 6	S 5	A – 9
1 C 3 0	J – 5	IC86	D – 5		
IC31	H – 5	IC87	D - 5	TP1	J – 5
1 C 3 2	M – 6	1088	D - 4	TP2	L – 4
1 C 3 3	J 6 H 6	1089	D – 6 D – 6	T P 3 T P 4	K – 4 J – 7
I C 3 4 I C 3 5	L - 5	I C 9 0 I C 9 1	B - 6	TP5	J – 7 L – 7
IC36	M - 5	IC92	C-6	TP6	K – 6
IC37	L - 5	IC93	C-5	TP7	H-7
IC38	M - 5	IC94	C - 5	TP8	H - 7
IC39	G - 4	IC95	C - 4	TP9	K – 7
I-C 4 0	F – 4	IC96	C – 4		

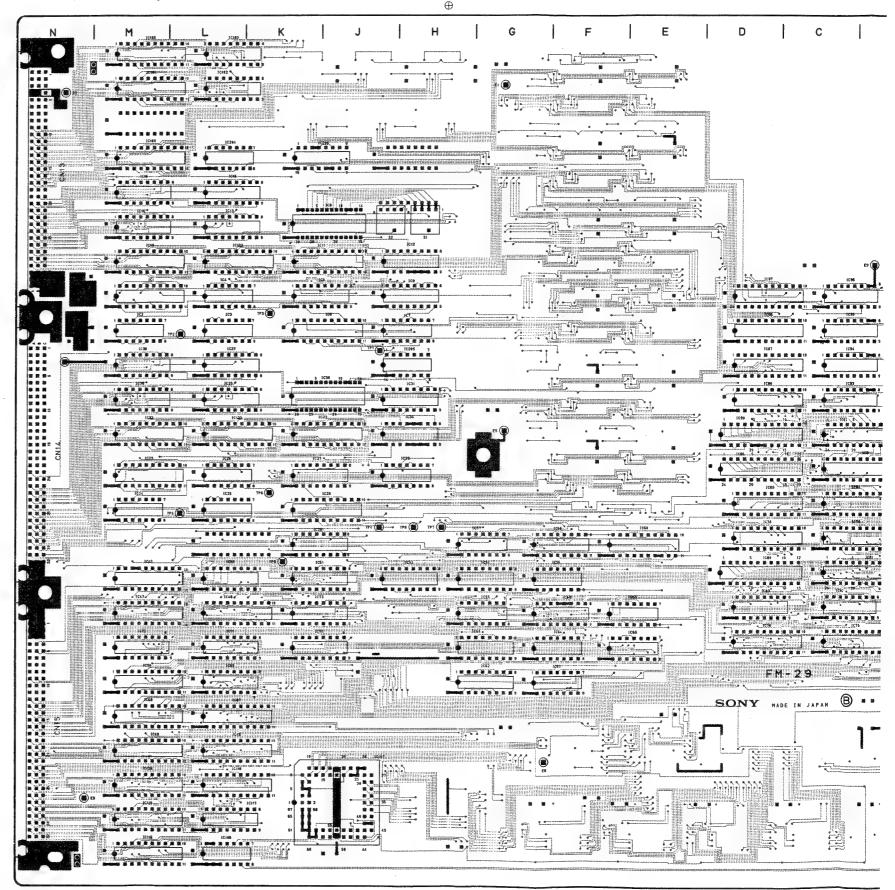




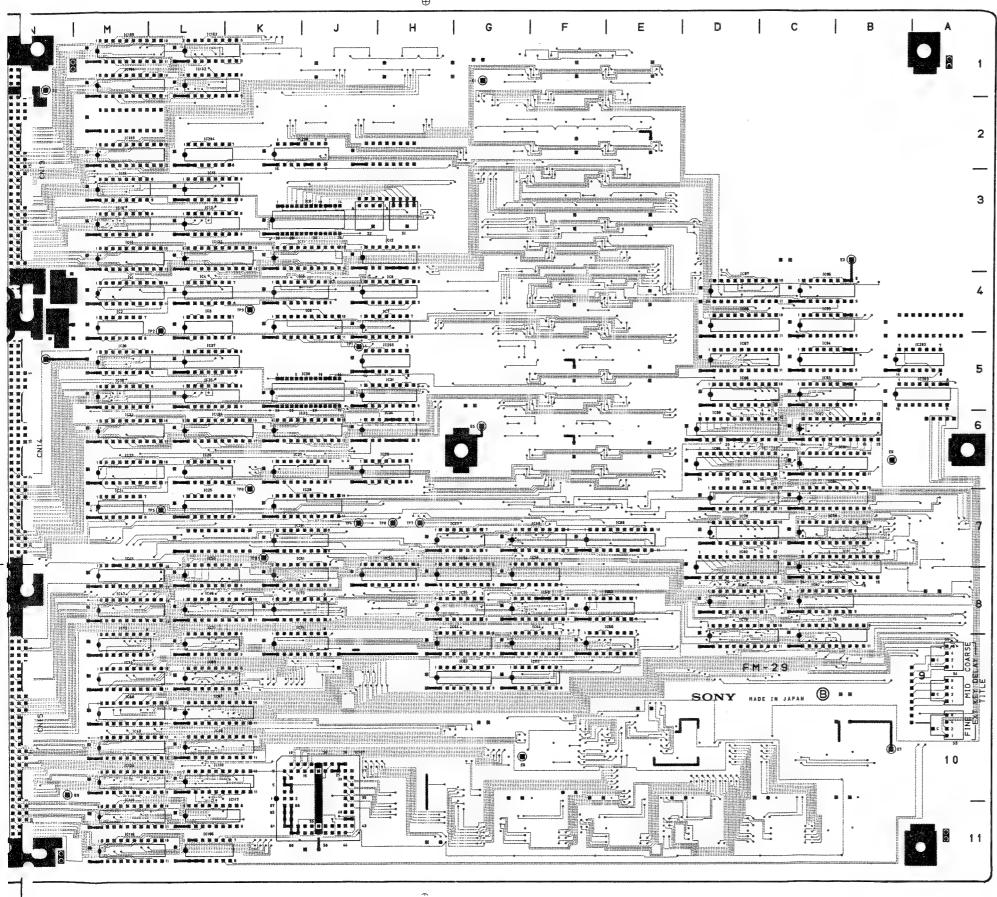


FM-29-A SIDE-

FM-29; Frame Synchronizer



## M-29; Frame Synchronizer



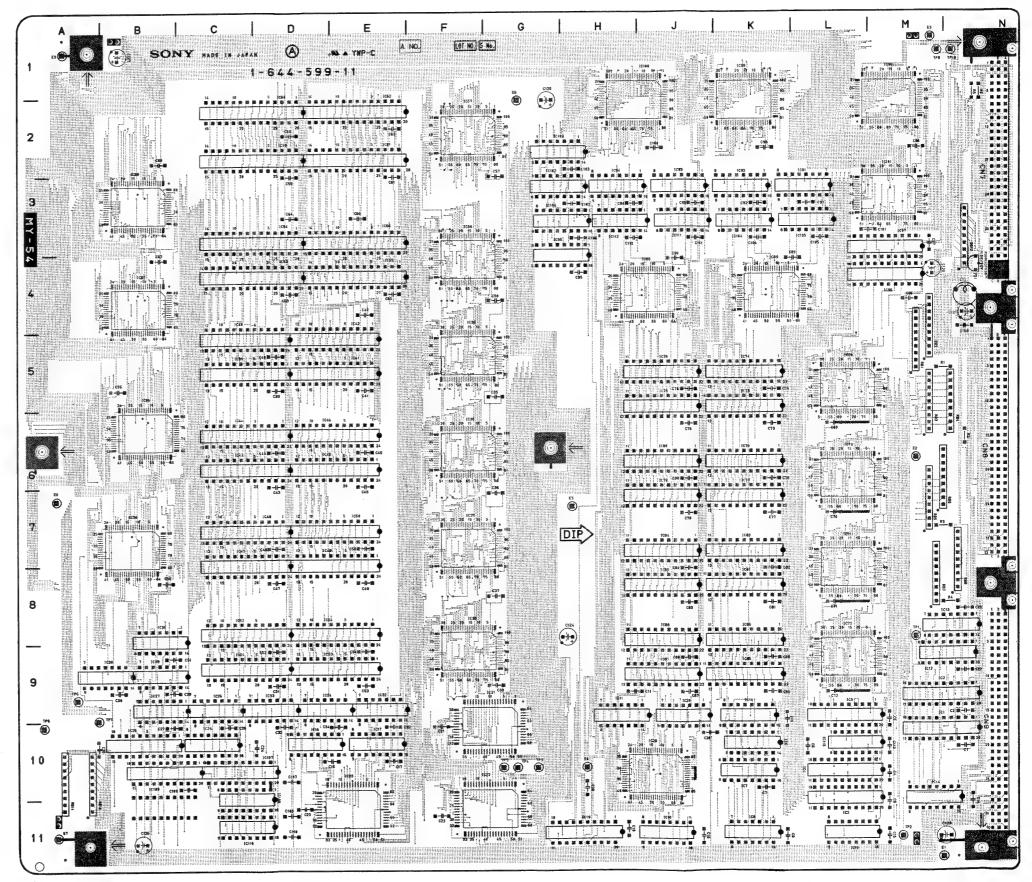
FM-29(1-644-600-11)

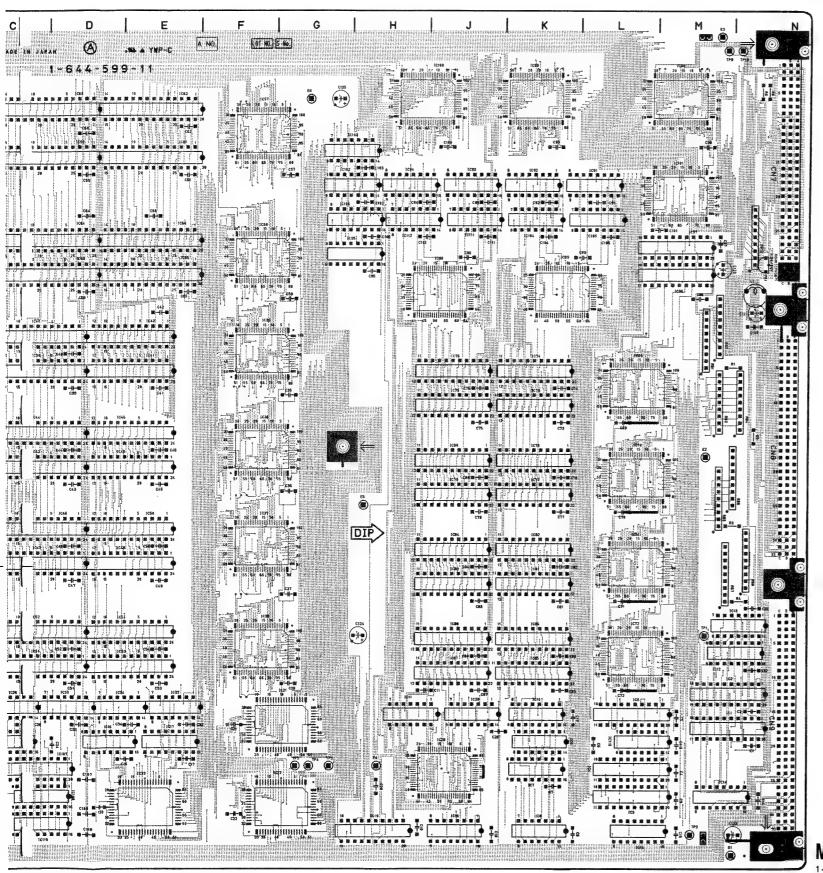
C N I 1 0 7		1044	0 5	1007	ъ .
CN1107	J – 10	IC 4 1	G – 5	1097	D - 4
0.11.4.0		IC 4 2	F – 5	IC98	H – 1
CN13	N - 2	IC 4 3	G – 6	IC99	J – 1
CN14	N - 6	IC 4 4	F – 6	IC100	M - 2
CN15	N – 9	IC 45	M – 7	IC101	K – 1
		IC 4 6	L – 8	IC102	L - 1
E 1	G – 1	IC 47	M – 8	IC103	L – 1
E 2	N – 1	IC 48	L – 10	IC104	M-1
E 3	B – 3	IC 49	M – 10	IC 105	M – 1
E 4	N - 5	IC50	L - 7	IC106	L-11
E 5	G - 6	IC51	K – 7	IC107	J – 10
E 6	B - 6	I C 5 2	H 8	IC108	H – 10
E 7	B-10	IC53	H – 7	IC109	G-11
E 8	G-10	IC54	G – 7	IC110	F-11
E 9	M – 10	IC55	G – 8	IC111	E-11
		IC 56	F – 7	IC112	D-11
IC1	M - 4	I C 5 7	G – 7	IC113	C-11
IC2	M – 4	IC58	F - 7	IC114	E-10
I C 3	L – 4	IC59	F - 8	IC115	F - 9
I C 4	L - 4	IC 6 0	E – 7	IC116	M-11
I C 5	J – 4	IC 6 1	G - 8	IC117	K – 10
IC6	J – 4	IC62	G - 9	IC118	L-10
IC7	H – 4	IC 63	F - 9	IC119	M - 10
I C 8	J - 3	IC 6 4	F - 8	IC120	M - 10
1 C 9	H – 4	IC65	E - 8	IC121	C-10
IC10	M – 3	I C 6 6	E - 8	IC122	L - 3
IC11	J - 3	IC 67	L - 9	IC123	L – 6
IC12	H-3	IC 68	M – 9	IC 2 0 1	K – 7
IC13	L - 3	IC 6 9	L - 9	1C202	A – 5
IC14	M-3	IC70	M - 9	IC 2 0 3	A - 5
IC15	L - 2	IC71	L – 8	1C204	L - 2
IC16	M - 2	1071	M - 8	IC 2 0 5	H – 5
IC17	G-1	I C 7 3	K - 8	IC 2 0 6	K – 2
IC18	F-1	IC 7 4	K – 8	10200	11 - 2
IC 19	G-2	IC75	C-8	PS1	N - 3
IC 2 0	F - 2	IC76	D - 8	1 3 1	14 - 0
IC 2 1	G-3	IC77	A – 7	RB1	H – 3
IC 2 2	F-3	1C78	D – 7	RB2	B - 9
IC 2 3	M-6	IC 7 9	C-7	RB3	A – 6
1 C 2 4	M - 6	1C 8 0	D – 7	nbo	A - 0
IC 2 5	L - 6	I C 8 1	B – 7	S 1	H - 3
IC 2 6	L - 6	I C 8 2	C – 8	S 2	J – 3
IC27	K – 6	IC83	D – 8	S 3	A – 10
1 C 2 8	J - 6	I C 8 4	C - 7	S 4	A-10
IC 2 9	J - 6				
		IC85	D - 6	S 5	A – 9
IC30	J - 5	IC86	D - 5	TD4	
IC31	H-5	IC 8 7	D - 5	TP1	J – 5
1 C 3 2	M - 6	IC88	D - 4	TP2	L – 4 K – 4
IC33	J - 6	IC89	D - 6	TP3	K – 4
IC34	H-6	IC 9 0	D-6	TP4	J – 7
IC35	L-5	IC 9 1	B - 6	TP5	L-7
IC36	M-5	1092	C-6	TP6	K – 6
IC37	L - 5	IC93	C - 5	TP7	H – 7
IC38	M - 5	IC94	C - 5	TP8	H-7
IC39	G - 4	IC95	C - 4	TP9	K – 7
IC 40	F – 4	IC96	C – 4		

FM-29-B SIDE-

#### MY-54; Field Memory

MY-54(1-644-599-11)										
		1044		1004	H – 2					
CN7	N - 2	IC 4 1	E – 5	I C 9 4 I C 9 5	G - 3					
CN8	N - 6	1 C 4 2 1 C 4 3	E – 4 C – 6	IC 9 6	M - 4					
CN9	N – 9	IC 4 4	C-6	IC 9 7	M - 3					
E 1	M – 1 1	1 C 4 5	D - 6	I C 9 8	M – 1					
E 2	M – 6	1C46	D - 6	IC99	K - 1					
E3	M – 1	IC 47	C-7	IC100	J – 1					
E 4	H – 1 0	IC48	D-7	IC101	M-2					
E 5	H – 7	IC 49	D - 7	IC102	G – 2					
E 6	G – 1	IC50	E – 7	IC103	H – 2					
E 7	A – 1 1	IC51	C - 9	IC104	K – 3					
E 8	A – 7	1 C 5 2	C-8	IC105	L - 3					
E 9	A – 1	IC53	D - 9	IC106	G-3					
		IC 5 4	D-8	IC107 IC108	D – 10 D – 11					
I C 1	M - 9	IC 5 5	B – <b>5</b> B – 7	IC109	B-10					
1 C 2 1 C 3	M – 9 L – 1 1	1 C 5 6 1 C 5 7	F - 2	IC110	C-11					
1 C 4	L-10	1C58	F – 3	IC111	J – 3					
I C 5	L - 9	IC 5 9	D-2	IC112	H-3					
I C 6	K-10	IC 6 0	D-1	IC113	L-10					
I C 7	K – 10	IC 6 1	E-2							
1 C 8	K-11	IC62	E – 1	PS1	N - 4					
IC10	K – 9	IC63	D – 4							
IC11	H – 9	IC 6 4	D - 3	RB1	M – 5					
IC12	M - 9	IC 6 5	E – 4	RB2	M – 5 M – 6					
IC13	N – 8	1 C 6 6 1 C 6 7	E – 3 B – 4	RB3 RB4	N - 6					
IC 1 4 IC 1 5	M – 1 0 L – 1 1	1 C 6 8	B - 2	RB5	M - 7					
1C15	D-10	1 C 6 9	L – 5	RB6	N - 7					
IC17	E-10	IC70	L – 6	RB7	M - 8					
IC18	J – 11	IC71	L – 7	RB8	N – 8					
IC19	H-11	IC72	L - 8	RB10	A – 11					
IC20	J – 10	IC73	K – 5	RB11	A – 11					
I C 2 1	G – 9	IC74	K – 5	RB12	N – 3					
1 C 2 2	G – 10	IC 75	J - 5	T.D.4						
1 C 2 3	E-10	1C76	J – 5	TP1 TP2	M – 8 M – 11					
1 C 2 4	C-10	1C77	K – 6 K – 6	TP3	G-10					
1025	B – 1 0 C – 9	1 C 7 8 1 C 7 9	J – 6	TP4	G-10					
1 C 2 6 1 C 2 7	B – 9	1073	J – 6	TP5	G-10					
1C28	J – 9	IC 8 1	K – 8	TP6	A - 9					
IC29	B - 9	IC82	K - 7	TP7	B - 9					
IC30	B - 9	IC83	J – 8	TP8	B – 9					
IC31	B – 8	1 C B 4	J – 7	TP9	M – 1					
1 C 3 2	E - 9	IC85	K - 9	TP10	N – 1					
IC33	D - 9	IC86	K – 8							
IC34	D - 9	IC 8 7	J – 9							
1035	F – 4 F – 6	I C 8 8 I C 8 9	J – 8 K – 3							
1 C 3 6 1 C 3 7	F - 6 F - 7	1099	J – 4							
IC37	F - 8	IC 9 1	L - 2							
1C39	C – 5	1092	K – 2							
IC40	C – 4	1 C 9 3	J - 2							

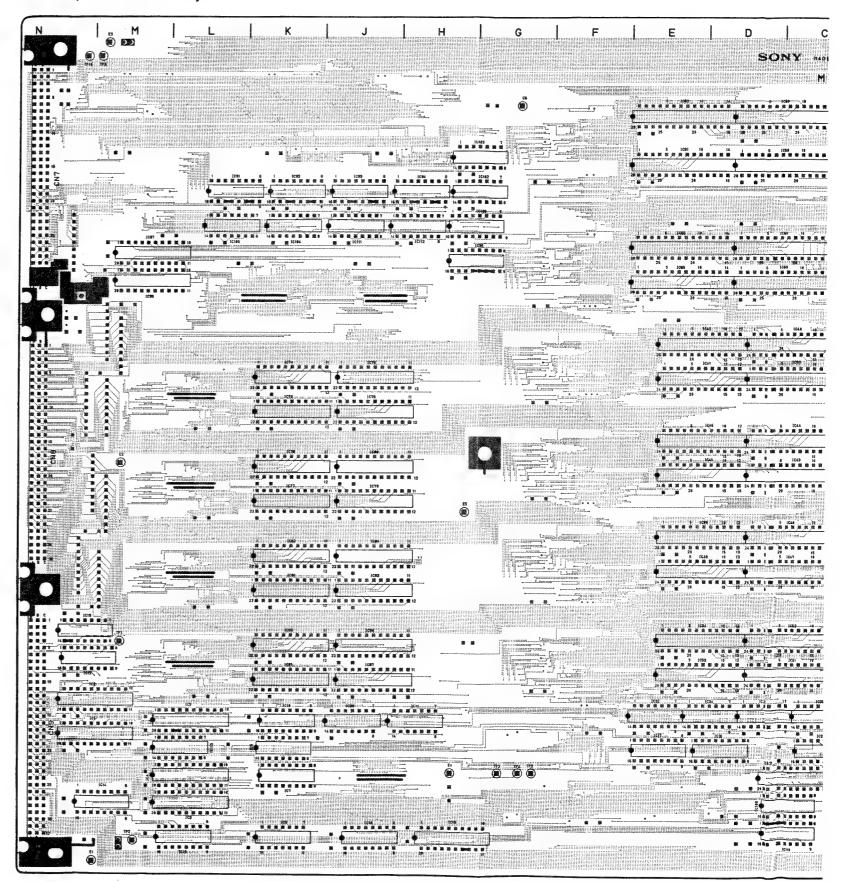




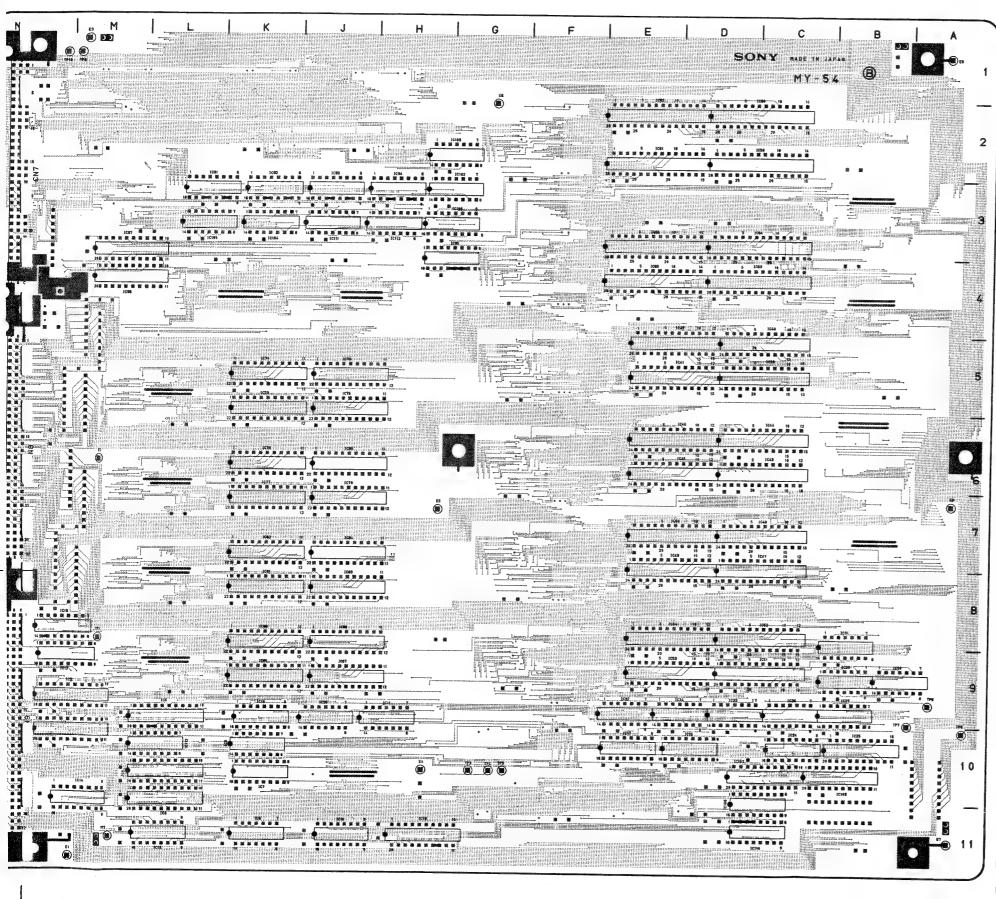
MY-54-A SIDE-

#### PROCESS UNIT MY-54 MY-54 PROCESS UNIT

#### MY-54; Field Memory



## 1 √ · 54; Field Memory



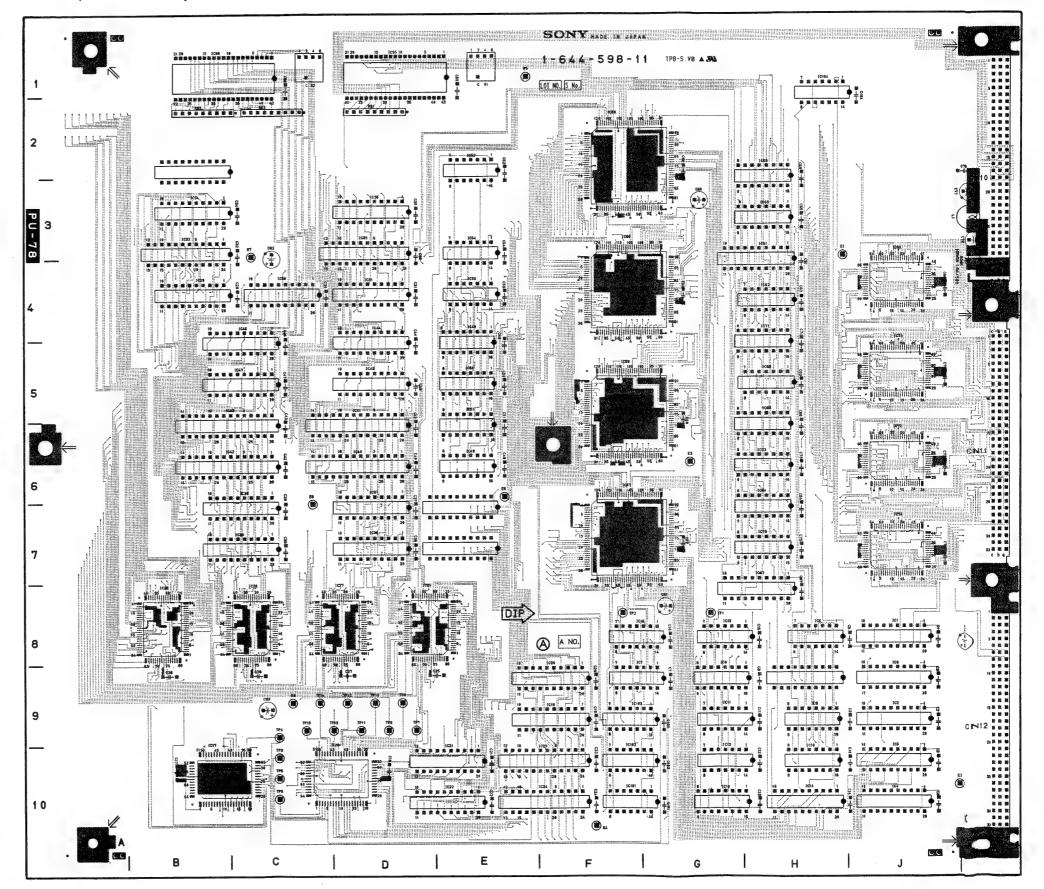
N-2IC 4 1 IC94 CN8 N ~ 6 IC42 E – 4 IC95 G - 3CN9 N-9IC43 C ~ 6 IC96 M-4IC44 IC97 M = 3IC 45 D - 6IC98 M-1E 2 M-6IC46 IC99 K - 1 E 3 IC47 C-7 IC100 J - 1 E 4 H-10 IC48 IC101 M-2 E 5 IC49 D ~ 7 IC102 G-2 E 6 G - 1 IC 50 IC103 H-2 E 7 A-11 IC51 C = 9IC104 E 8 A - 7 IC 5 2 C-8 IC105 L - 3 E 9 IC53 D = 9IC106 G-3 IC 5 4 D - 8 IC107 D-10 IC1 IC55 B - 5 IC108 D-11 IC2 M-9 IC 56 B – 7 IC109 B-10 IC3 IC57 IC110 C-11 IC4 L-10 LC 5.8 F ~ 3 IC111 J - 3 LC 5 L - 9 IC59 IC112 H-3 IC6 K - 101060 D-1IC113 L-10 IC7 K - 10IC 6 1 1 C 8 K-11 IC62 E -- 1 N-4 IC10 K - 9 IC63 D – 4 IC11 IC 64 D-3RB1 M -5 IC12 M = 9IC65 RB2 M -5 IC13 N - 8 IC66 E - 3 RB3 M-6 IC14 M = 10IC 67 B - 4 N -6 IC 15 IC68 B-2RB5 M -7 IC16 D - 10IC 69 N -7 IC17 E-10 IC70 L ~ 6 RR7 M -8 IC18 J - 11 IC71 L – 7 N -8 IC19 H-11 IC72 L - 8 **RB10** A-11 IC20 J-10 IC73 K – 5 A-11 IC21 G-9 IC74 K – 5 N-3IC22 G-10 1C75 J - 5 IC 23 E-10 IC76 J - 5 M -8 1C24 C-10 IC77 K - 6 TP2 LC 25 B - 10IC78 K – 6 TP3 G-10 IC26 IC79 J - 6 TP4 IC27 B = 9IC80 TP5 G = 10IC28 J - 9 IC81 K - 8 TP6 IC29 B - 9IC82 K – 7 TP7 B - 9 IC30 IC83 J - 8 TP8 B - 9 I C 3 1 B - 8IC84 J – 7 IC32 E - 9 IC85 K - 9 TP10 N-1 IC33 D-9 IC86 K – 8 IC34 D – 9 IC87 J = 9IC35 F - 4 IC88 J - 8 IC36 F - 6 IC89 K – 3 IC37 IC90 J - 4 F - 8 IC38 IC91 L - 2 IC39 C - 5 IC92 K - 2 IC40 C - 4 IC93 J – 2

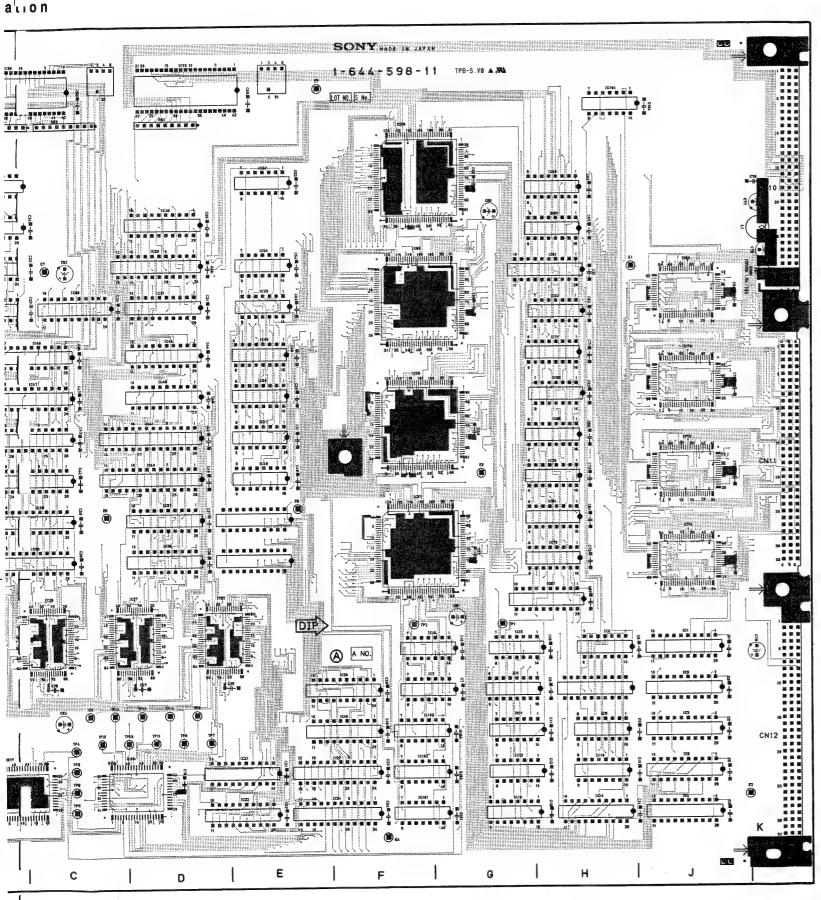
MY-54(1-644-599-11)

MY-54-B SIDE-

#### PU-78; Address Operation

P U - 78	(1-644-59	98-11)			
CN10 CN11 CN12	K – 2 K – 6 K – 9	IC 4 0 IC 4 1 IC 4 2	D - 6 D - 5 C - 6	TP4 TP5 TP6	C-9 C-10 C-10 D-9
E 1 E 2	H – 3 J – 10	I C 4 3 I C 4 4 I C 4 5	C – 5 D – 4 D – 5	TP7 TP8 TP9	D - 9 D - 9
E 3	G-6	IC 46	C-4	TP10	D - 9
E 4	F – 10	IC47	C-5	TP11	D – 9
E 5	E – 1	IC 48	E – 4	TP12	D-9
E 6	E - 6	IC 4 9	E - 6	TP13	D - 9 C - 9
E 7 E 8	C – 3 C – 6	I C 5 0 I C 5 1	E – 5 E – 5	TP14 TP15	C - 9
E 9	C - 9	IC 5 2	E - 2		•
		IC53	E – 4		
I C 1	J – 8	IC54	E – 3		
1 C 2	J – 9	1 C 5 5	D – 1		
1 C 3	J – 8	1C56	B – 1 F – 6		
I C 4 I C 5	J – 1 0 J – 1 0	1 C 5 7 1 C 5 8	F-2		
I C 6	H – 8	IC 5 9	F – 5		
I C 7	F – 8	IC 6 0	F – 3		
I C 8	G – 8	IC 6 1	H-3		
I C 9	H-9	1 C 6 2	H – 4 H – 5		
IC10 IC11	H – 10 G – 9	1 C 6 3 1 C 6 4	H – 6		
IC12	G – 10	IC 6 5	H – 3		
IC13	G-10	IC 6 6	H – 5		
IC14	H – 10	IC 67	H – 7		
IC 15	G – 8	IC 68	J – 3 H – 2		
I C 1 6 I C 1 7	F – 8 B – 9	1 C 6 9 1 C 7 0	J - 4		
IC 18	D-9	IC71	H – 4		
IC19	F – 9	IC72	J – 6		
1C20	F – 8	IC73	H – 6		
IC 21	E-10	1C74	J – 7		
1 C 2 2 1 C 2 3	E – 10 F – 10	IC 7 5 IC 1 0 1	H – 7 F – 10		
1C24	F-10	IC102	F-10		
IC25	D - 8	IC103	F – 9		
IC26	B – 8	IC104	H – 1		
IC27	D - 8	D.C.4	L A		
1 C 2 8 1 C 2 9	C – 8 B – 4	PS1	K – 4		
1C30	C-4	RB1	D-2		
IC31	D – 4	RB2	B-2		
IC32	B – 3	RB3	C - 2		
IC33	D - 3	0.4			
IC34	B – 3 D – 3	S 1 S 2	E – 1 C – 1		
IC35 IC36	D-3 D-7	0 2	0 - 1		
IC37	D - 6	TP1	G-8		
IC38	C-7	TP2	F – 8		
1 C 3 9	C – 6	TP3	C-10		

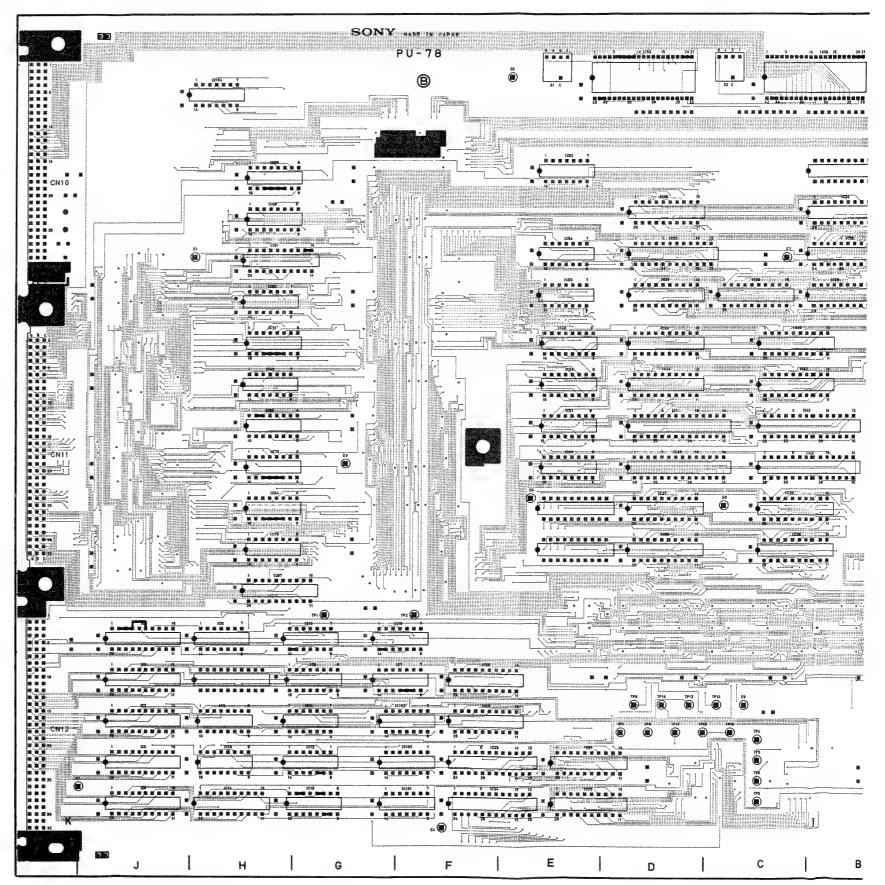




PU-78-A SIDE-

#### PROCESS UNIT PU-78 PU-78 PROCESS UNIT

## PU-78; Address Operation



C-9

C-10

D - 9

D - 9

D-9

D - 9

TP4

TP5

TP6 TP7

TP8

TP9

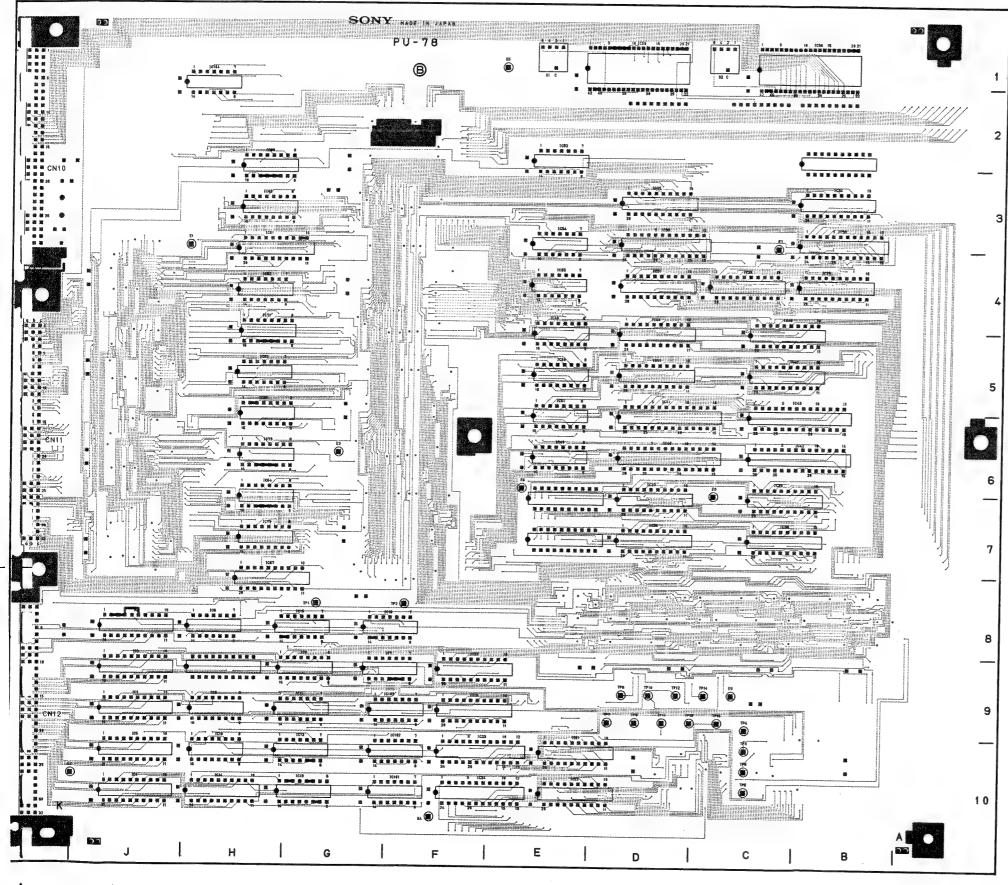
TP10

TP11 TP12

TP13

TP14 TP15

## J-78; Address Operation



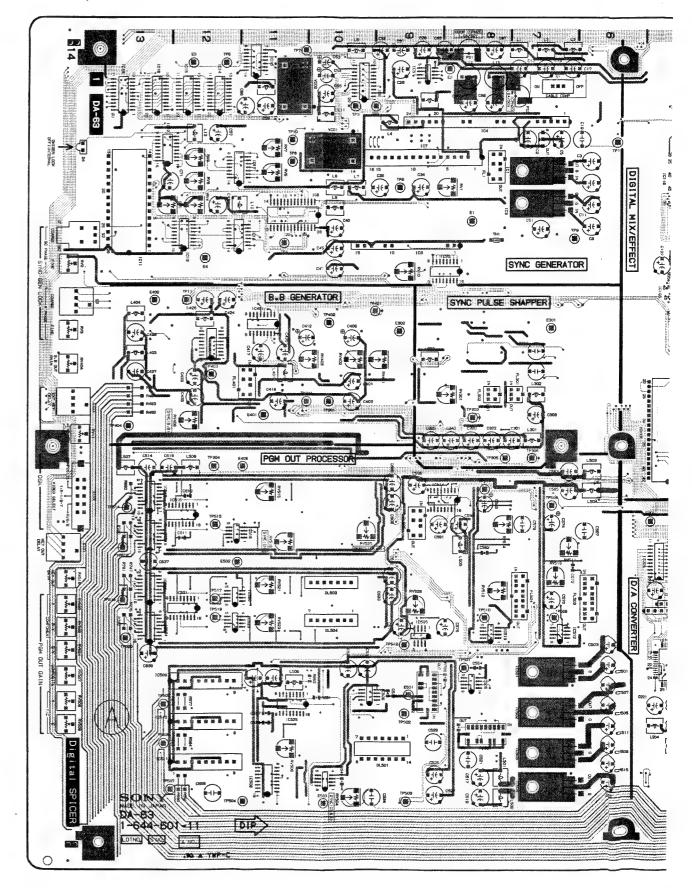
PU-7	PU-78(1-644-598-11)										
CN10 CN11 CN12	K – 2 K – 6 K – 9	IC 4 0 IC 4 1 IC 4 2	D - 6 D - 5 C - 6								
E 1 E 2 E 3 E 4 E 5 E 6 E 7 E 8 E 9	H-3 J-10 G-6 F-10 E-1 E-6 C-3 C-6 C-9	IC 43 IC 44 IC 45 IC 46 IC 47 IC 48 IC 49 IC 50 IC 51 IC 52 IC 53	C-5 D-4 D-5 C-4 C-5 E-4 E-6 E-5 E-5 E-2 E-4								
IC1 IC2 IC3 IC4 IC5 IC6 IC7 IC8 IC9 IC10 IC11 IC12 IC13 IC14	J - 8 J - 9 J - 8 J - 10 J - 10 H - 8 F - 8 G - 8 H - 9 H - 10 G - 9 G - 10 H - 10	IC 5 4 IC 5 5 IC 5 6 IC 5 7 IC 5 8 IC 6 0 IC 6 1 IC 6 2 IC 6 3 IC 6 4 IC 6 5 IC 6 6 IC 6 7	E - 3 D - 1 B - 1 F - 2 F - 5 F - 3 H - 4 H - 5 H - 3 H - 5 H - 7								
IC 1 5 IC 1 6 IC 1 7 IC 1 8 IC 1 9 IC 2 0 IC 2 1 IC 2 2 IC 2 3 IC 2 4 IC 2 5	G-8 F-8 B-9 D-9 F-9 F-8 E-10 E-10 F-10 D-8	IC 6 8 IC 6 9 IC 7 0 IC 7 1 IC 7 2 IC 7 3 IC 7 4 IC 7 5 IC 1 0 1 IC 1 0 2 IC 1 0 3	J - 3 H - 2 J - 4 H - 4 J - 6 H - 6 J - 7 H - 7 F - 1 0 F - 1 0								
C 2 6 C 2 7 C 2 8	B - 8 D - 8 C - 8	PS1	H – 1 K – 4								
C 2 9 C 3 0 C 3 1 C 3 2 C 3 3	B - 4 C - 4 D - 4 B - 3 D - 3	RB1 RB2 RB3	D - 2 B - 2 C - 2								
C 3 4 C 3 5 C 3 6	B - 3 D - 3 D - 7	S 1 S 2	E – 1 C – 1								
C 3 7 C 3 8 C 3 9	D - 6 C - 7 C - 6	TP1 TP2 TP3	G - 8 F - 8 C - 10								

PU-78 -B SIDE-

	_	_	_	_	_	_		-	_	_	_	_	_	_	_		_	-
D	Α	_	6	3	(	1	_	6	4	4	_	6	0	1	_	1	1	1

CN1	B - 1	IC101	G-3	⊚JR10	* C – 1 1	Q416	* D – 1 2	Q567	* J – 12	RV526	H – 9	
CN2	F – 1	IC102	F – 3	JR11	* C-11	Q417	* D - 12	Q568	* J – 13			
CN3	K – 1	IC103	D-2	©JR12	* C - 11	Q418	* D – 13	Q572	* H - 10	S 1	A - 7	
CN40	H – 1	I C 1 0 4	D – 3	JR13	* C – 9	Q419	* D – 1 3	Q573	* H – 11	S 2	C-14	
CN50	D – 1	IC105	D - 5	<b>◎JR14</b>	* C - 9	Q420	* E - 12	Q574	* G - 9	S 3	D - 14	
		IC108	E – 4	JR15	* C - 9	Q421	* E - 12	Q577	* H - 9	S 1 0 1	H-14	
DL501	L - 9	IC109	F – 4	◎JR16	* C - 9	Q422	* E - 12	Q578	* J ~ 9	S102	G – 14	
DL503	H – 10	IC110	F – 4	JR17	* A - 12	Q423	* F - 12			S103	F-14	
DL504	J – 10	IC111	J – 4	©J R 18	* A - 12	Q424	* E - 13	RB101	A - 1			
		IC112	E – 4	@JR20	* A - 12	Q425	* E - 13	RB102	A – 1	TH1	C - 8	
D 1	* C - 9	IC114	B - 2	JR21	* A - 1 1	Q426	* E - 13	RB103	A – 1			
D 2	* B – 11	IC115	B – 4	©JR22	* A – 1 1	Q427	* E - 9	RB104	G – 1	TP1	B – 6	
D 3	* B - 12	IC116	B - 5		* D - 10	Q428	* F - 12	RB105	G – 1	TP2	A - 9	
D 4	B - 14	IC117	F - 6	©JR402		Q501	* L - 8	RB106	F - 1	TP3	A - 10	
		IC118	J – 3		* E-11	Q502	* L – 7	RB107	F-1	TP4	C-11	
E 1	C – 8	IC119	J – 3	•		Q503	* K – 8	RB108	G - 2	TP5	A - 1 2	
E 2	A – 8	IC 2 0 1	K – 3	PS1	A – 8	Q506	* L – 8	RB109	G - 2	TP6	B-9	
E 3	A - 12	10202	L - 3	PS2	A - 7	Q507	* K – 8	RB110	F - 2	TP7	A – 1 1	
E 4	D-12	10203	H – 4	PS3	C-1	Q508	* K – 9	RB111	F – 2	TP8	B-11	
E 101	H – 2	IC 2 0 4	H - 4	100	0-1	Q512	* L – 9	RB112	D – 1	TP9	C-7	
E102	B – 4	IC 2 0 5	H - 5	Q 1	* A – 6	Q514	* L – 10	RB113	D-1	TP10	B-11	
E102	E – 3	IC 2 0 6	J - 4	Q2	* A - 6	Q514	* L – 10	RB114	C-1	TP11	D-12	
	G – 5	IC 2 0 7	J - 4 J - 5	Q3	* A - 9	Q515 Q516	*L-10	RB114	C-1	TP201	G-5	
E 2 0 1				Q 4		Q517	*L-10	RB202	H – 4	TP201	G - 5	
E 2 0 2	L – 4	10208	K – 4	Q 5	* A – 10 * B – 8	Q517 Q518	* L - 1 1	RB203	п – 4 J – 4	TP202	L - 4	
E301	D – 7	10401	D-11	Q6	* C - 8	Q518 Q519	* K - 11	RB204	J – 4 J – 5	TP203	L - 5	
E302	D - 9	1C402	E-12			Q519 Q520				TP204	L - 5	
E 4 0 1	F-11	1C501	K – 7	Q7	* C - 7	Q520 Q521	* K – 11	RB205	K – 4	TP205	L - 3 L - 4	
E 4 0 2	D-13	IC502	K – 7	Q 8 Q 9	* C - 7	Q521 Q522	* K – 1 1 * G – 6	DV4	B – 8	TP301	F - 10	
E 4 0 3	F-11	10503	L-7		* A – 11			RV1				
E 5 0 1	K – 9	IC504	L-7	Q10	* B ~ 13	Q523	* H – 6	RV2	D-14	TP302	E-11 F-8	
E 5 0 2	H-12	10505	K – 8	Q11	* B – 12	Q 5 2 4	* J – 6	RV3	E-14	TP303		
E503	L – 10	IC506	K-9	Q 2 0 1	* K – 4	Q525	* H – 9	RV4	C-12	TP304	F-12	
		IC507	L – 10	Q202	* K – 4	Q526	* J – 7	RV5	C-12	TP305	F - 8	
FL1	B - 8	IC508	L-11	Q203	* K – 4	Q527	* H – 7	RV6	B-11	TP306	F - 7	
FL301	E - 7	IC509	K – 13	Q204	* L – 4	Q528	* H – 7	RV7	B - 11	TP401	D - 9	
FL302	E - 8	IC510	K-13	Q301	* D - 9	Q529	* G - 7	RV8	B-12	TP403	E-12	
FL401	E – 12	IC511	L-13	Q302	* E - 9	Q530	* G - 7	RV9	B-12	TP404	F-13	
FL501	L – 8	IC512	J – 7	Q303	* E - 9	Q531	* H – 7	RV10	D - 9	TP501	J – 8	
FL502	K – 9	IC513	J – 8	Q304	*F-9	Q532	* J – 7	RV11	F-14	TP502	K – 9	
FL503	J – 7	IC514	G-9	Q305	* D – 8	Q533	* J – 8	RV301	E - 8	TP503	L - 9	
FL504	H – 7	IC516	G-12	Q306	* E - 8	Q534	* H ~ 7	©RV401	E - 9	TP504	L-12	
FL505	G – 9	IC517	G-13	Q307	* E - 8	Q535	* H – 8	RV402	E-10	TP505	K-13	
		IC518	H-13	Q308	* E – 7	Q536	* G – 8	©RV403	E - 10	TP506	L-13	
IC1	B – 8	IC519	H – 13	Q309	* D – 7	Q537	* G – 8	RV404	E-14	TP507	L-13	
IC2	B – 7	IC520	H-11	Q311	* E - 7	Q538	* G - 8	RV406	F-12	TP508	J - 7	
I C 3	C – 8	10521	H-12	Q312	* F ~ 7	Q540	* K – 10	RV504	L-10	TP509	G - 7	
I C 4	B - 8	IC522	H – 13	Q313	* D – 8	Q541	* K – 10	RV506	L-11	TP510	J - 8	
I C 5	A – 9	IC523	J-11	Q315	* E – 8	Q 5 4 2	* K – 10	RV507	K – 14	TP511	G - 8	
I C 6	A – 9	IC524	J – 13	Q316	* F - 8	Q 5 4 5	* G - 11	RV508	K – 14	TP512	J - 9	
I C 7	B – 9	IC525	K-11	©Q401	* E - 10	Q546	* G – 12	RV509	K – 1 4	TP514	G-13	
I C 8	C-10	IC526	J – 9	Q402	* E - 9	Q 5 4 8	* G – 12	R V 5 1 1	H – 7	TP515	G-12	
IC9	C – 9	IC601	K – 2	Q403	* D – 1 0	Q549	* G – 13	RV512	H – 8	TP516	H – 13	
IC10	A – 1 1	IC602	J - 2	@Q404	* E – 10	Q 5 5 1	* G – 11	©RV513	H – 7	TP517	H-12	
IC11	C-13	IC603	H – 1	@Q405	* D – 11	Q553	* H – 12	R V 5 1 4	H – 8	TP518	J – 13	
IC12	B – 13			Q406	* D – 11	Q554	*H-13	R V 5 1 5	G-11	TP519	J – 12	
IC13	C - 1 2	JR1	* A – 1 1	©Q407	* E ~ 11	Q556	* J – 10	R V 5 1 6	H – 14	T P 5 2 0	J – 13	
IC14	A – 12	⊚JR2	* A – 1 0	Q408	* D – 11	Q557	* H – 11	R V 5 1 8	H-11			
IC15	A – 12	JR3	* J - 10	Q409	* E – 11	Q558	* J ~ 11	R V 5 2 0	J – 14	VCO1	B – 1 0	
IC16	A – 13	⊚JR4	* J - 10	Q410	* F – 12	Q560	* H – 12	R V 5 2 1	H – 11	VCO2	A – 1 0	
IC17	B-11	JR5	* J – 10	Q411	* F – 12	Q561	* H - 13	R V 5 2 2	J – 1 4			
IC18	C-11	⊚JR6	* J – 10	Q413	* E - 12	Q563	* J – 10	R V 5 2 3	J – 11	*:SOLD	ERING SID	Œ
IC19	A – 13	JR7	* C-11	Q414	* E - 12	Q564	* J – 11	RV524	J – 14			
IC20	C-8	JR9	* C-11	Q415	* D - 12	Q565	* J 1 1	RV525	H – 10	⊚:EK 0	NLY	

#### DA-63; D/A Converter



#### DA-63;D/A Converter

J ~ 12

H - )

H - 1

G - 9

A – 1

G – 1

G -

G – '2

F - 2

D –

C - 1

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D – 9

E -

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K -

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H - 11J-14 J - [

H -H-

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E-liu

D - 14

E-,14

B-11

RV526 H-9

S 1

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S 3 S101

S102 S103

TH1

TP1

TP2

TP3

TP4

TP5

TP6

TP7

TP8

TP9

TP10

TP11

TP201

TP302

TP202 G-5

TP203 L-4

TP204 L-5

TP205 L-5 TP206 L-4

TP301 F-10

TP303 F-8

TP304 F-12

TP305 F-8 TP306

TP401 D-9

TP403 E-12

TP404 F-13 TP501 J-8

TP502 K-9 TP503 L-9

TP504 L-12

TP505 K-13 TP506 L-13 TP507 L-13

TP508 J-7

TP509 G-7 TP510 J-8 TP511 G-8

TP512 J-9

TP514 G-13 TP515 G-12

TP516 H-13 TP517 H-12

TP518 J-13 TP519 J-12

TP520 J-13

VCO1 B-10 VCO2 A-10

©:EK ONLY

\*: SOLDERING SIDE

A – 7

C-14 D-14

H – 14 G-14

F - 14

C - 8

B – 6

A - 9

A - 10

C-11

A – 12

B - 9

A - 11

B-11

C-7

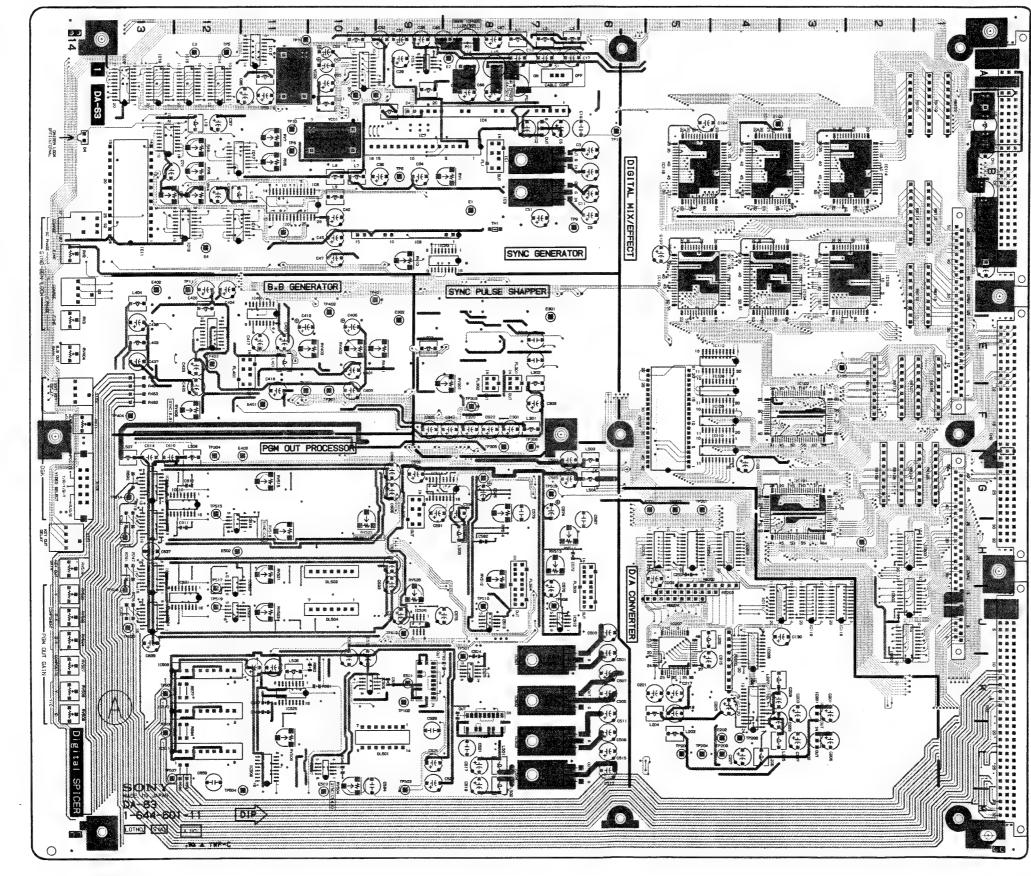
B-11

D-12

G - 5

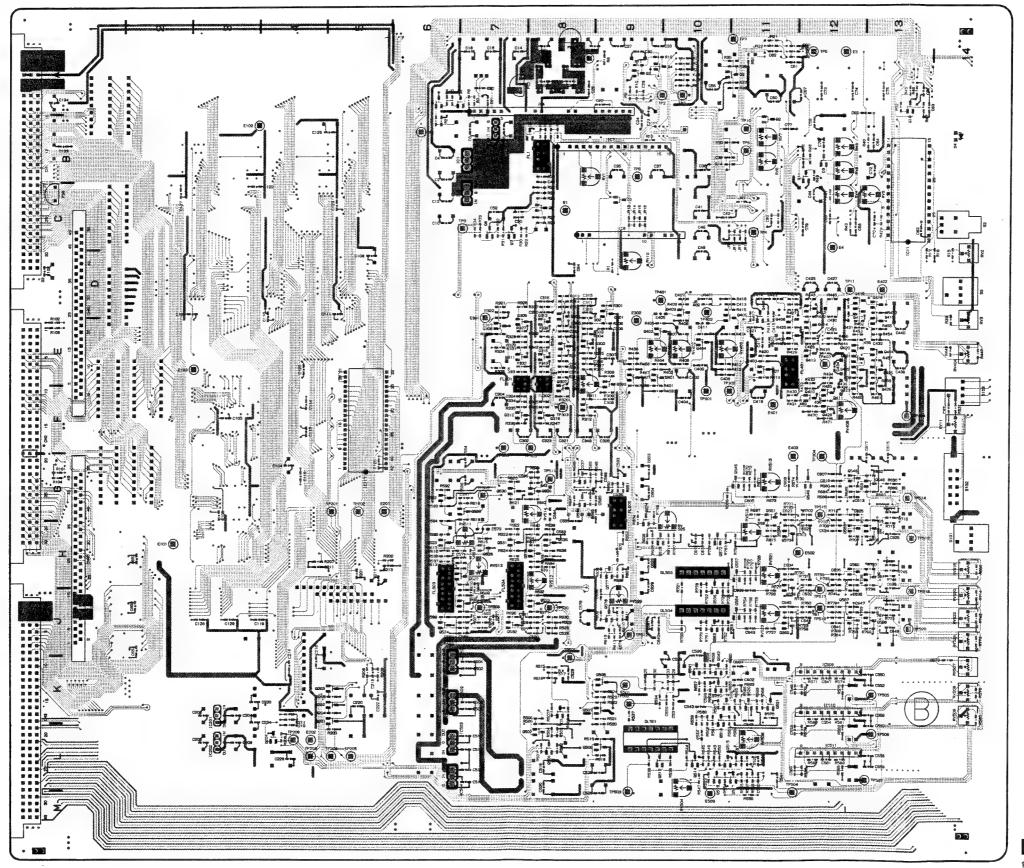
E-11

F - 7



DA-63 -A SIDE-1-644-601-11 DFS-500/500P

## DA-63; D/A Converter



DA-63-B SIDE-1-644-601-11 DFS-500/500P

DA.

CN1 CN2 CN3 CN4 CN5 DL5 DL5 DL5

E 2

E1( E1( E 2 ( E2( E3( E3( E4( E4( E4( E5( E5( E5( FL: FLC FLE FL FL FL

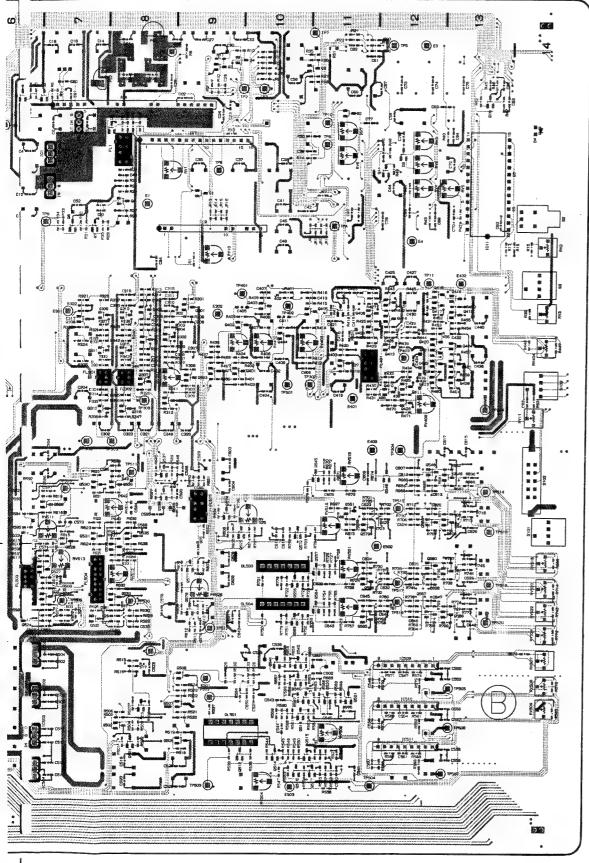
IC:

IC:

IC:

IC:

1 C :

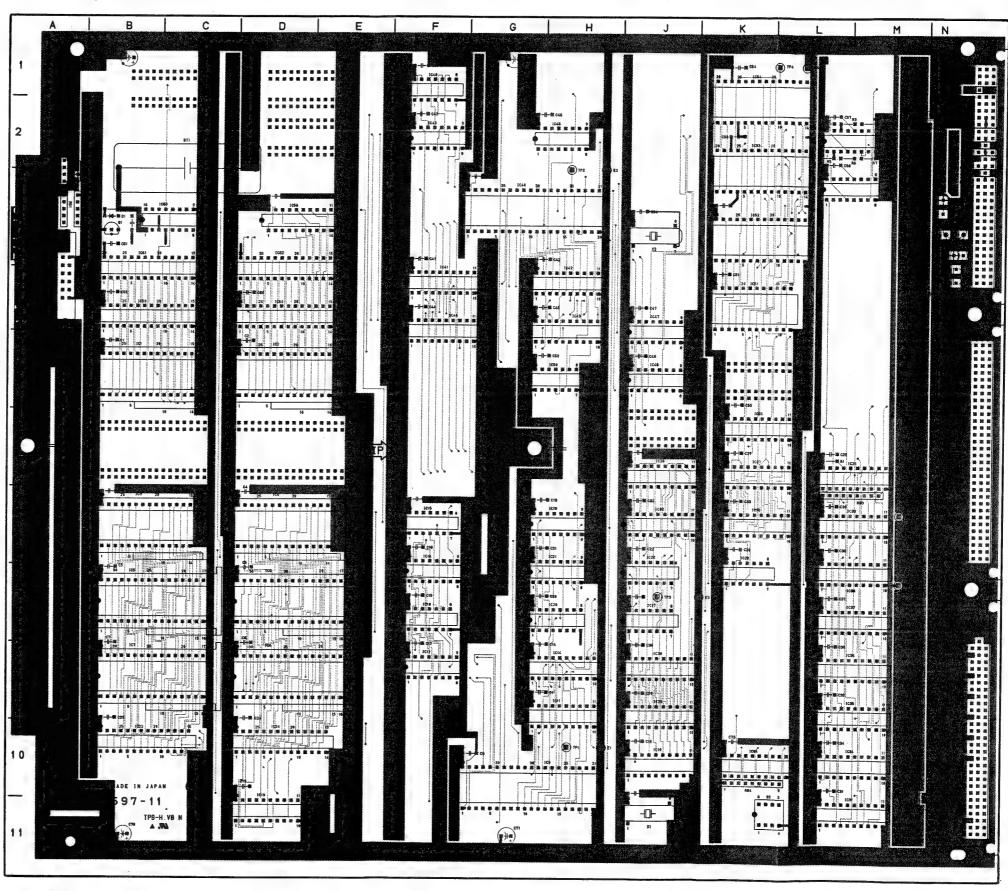


DA-63 -B SIDE-1-644-601-11 DFS-500/500P

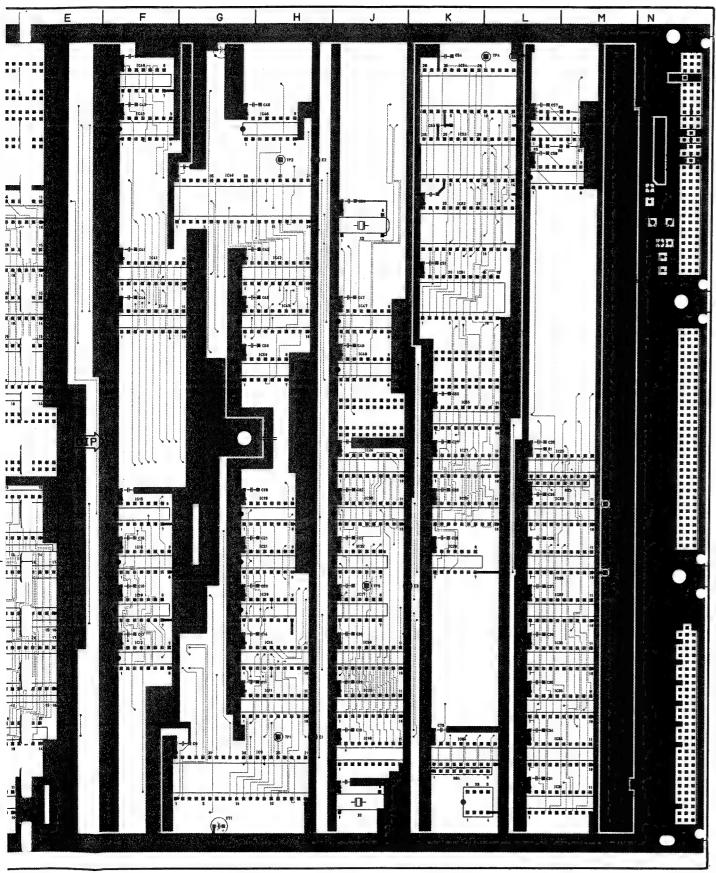
DA-63(1-644-601-11)												
CN1	D 4	10101	0 0	01540		0.440	<b>-</b>					
CN2	B – 1 F – 1	IC101 IC102		©JR10 JR11	* C = 11 * C = 11	Q416 Q417	* D – 12 * D – 12	Q567	* J – 12	R V 5 2 6	H - 9	
CN3	K – 1	IC103		©JR12	* C-11	Q417	* D = 12	Q 5 6 8 Q 5 7 2	* J – 13 * H – 10	S 1	A - 7	
CN40	H – 1	IC104		JR13	* C - 9	Q419	* D – 13	Q572	* H = 11	S 2	C-14	
CN50	D-1	IC105		©JR14	* C - 9	Q420	* E - 12	Q574	* G – 9	S 3	D-14	
		IC108	E – 4	JR15	* C - 9	Q421	* E - 12	Q577	* H – 9	S101	H-14	
DL501	L ~ 9	IC109	F – 4	©JR16	* C - 9	Q422	* E - 12	Q578	* J – 9	S102	G-14	
DL503	H – 10	IC110	F – 4	JR17	* A – 12	Q423	* F - 12			S103	F-14	
DL504	J – 10	IC111	J – 4	⊚JR18	* A – 12	Q424	* E – 13	RB101	A – 1			
<b>.</b> .		IC112	E – 4	©JR20	* A – 12	Q425	* E ~ 13	RB102	A – 1	TH1	C-8	
D 1	* C - 9	IC114	B - 2	JR21	* A – 11	Q426	* E - 13	RB103	A – 1			
D 2	* B – 11	IC115	B – 4	©JR22	* A – 11	Q427	* E - 9	RB104	G – 1	TP1	B-6	
D 3 D 4	* B – 12 B – 14	IC116 IC117	B ~ 5 F ~ 6	JR401 ©JR402	* D - 10	Q428	*F-12	RB105	G – 1	TP2	A - 9	
D +	D-14	IC118	J ~ 3		* E - 11	Q501 Q502	* L – 8 * L – 7	RB106	F-1	TP3	A -1 0	
E 1	C - 8	IC119	J - 3	011403	+ L - I I	Q502 Q503	* K – 8	RB107 RB108	F – 1 G – 2	TP4	C-11	
E 2	A – 8	IC 2 0 1	K – 3	PS1	A – 8	Q506	* L – 8	RB109	G - 2	TP5 TP6	A -1 2 B -9	
E 3	A - 12	1 C 2 0 2	L - 3	PS2	A - 7	Q507	* K - 8	RB110	F – 2	TP7	A - 1 1	
E 4	D-12	IC203	H – 4	PS3	C-1	Q508	* K – 9	RB111	F - 2	TP8	B-11	
E101	H - 2	IC204	H – 4			Q512	* L – 9	RB112	D – 1	TP9	C-7	
E102	B – 4	IC205	H – 5	Q 1	* A - 6	Q514	* L - 10	RB113	D - 1	TP10	B-11	
E103	E – 3	1C206	J – 4	Q 2	* A – 6	Q515	* L – 10	RB114	C – 1	TP11	D-12	
E 2 0 1	G – 5	IC207	J - 5	Q3	* A – 9	Q516	* L – 10	RB115	C - 1	TP201	G -5	
E202	L – 4	IC208	K – 4	Q 4	* A – 10	Q517	* L – 11	RB202	H – 4	TP202	G -5	
E301	D-7	IC 4 0 1	D-11	Q 5	* B – 8	Q518	* L – 10	RB203	J – 4	TP203	L - 4	
E302 E401	D – 9 F – 1 1	IC402	E-12	Q 6	* C - 8	Q519	* K – 1 1	R B 2 0 4	J – 5	TP204	L - 5	
E 4 0 2	D-13	IC501 IC502	K – 7 K – 7	Q 7 Q 8	* C – 7 * C – 7	Q 5 2 0 Q 5 2 1	* K – 11	RB205	K – 4	TP205	L - 5	
E403	F-11	10502	L - 7	Q9	* A – 11	Q521 Q522	* K ~ 1 1 * G ~ 6	RV1	D 0	TP206	L - 4	
E 5 0 1	K – 9	IC 5 0 4	L - 7	Q10	* B – 13	Q522 Q523	* H – 6	RV2	B – 8 D – 14	TP301 TP302	F-10	
E502	H-12	IC505	K – 8	Q11	* B – 12	Q 5 2 4	* J - 6	RV3	E - 14	TP302	E - 1 1 F - 8	
E503	L-10	IC506	K – 9	Q 2 0 1	* K - 4	Q525	* H – 9	RV4	C-12	TP304	F-12	
		1C507	L-10	Q202	* K – 4	Q526	* J – 7	RV5	C-12	TP305	F - 8	
FL1	B – 8	IC508	L – 1 1	Q203	* K - 4	Q527	* H – 7	RV6	B-11	TP306	F - 7	
FL301	E – 7	IC509	K-13	Q 2 0 4	* L – 4	Q528	* H – 7	RV7	B-11	TP401	D - 9	
FL302	E - 8	IC510	K – 13	Q 3 0 1	* D – 9	Q529	* G - 7	RV8	B-12	TP403	E-12	
FL401	E-12	IC511	L-13	Q302	* E - 9	Q530	* G - 7	RV9	B – 12	TP404	F-13	
FL501 FL502	L-8	IC512	J – 7	Q303	* E - 9	Q531	* H – 7	R V 1 0	D – 9	TP501	J - 8	
FL502	K – 9 J – 7	IC513 IC514	J – 8 G – 9	Q304 Q305	*F-9	Q532	* J – 7	RV11	F – 14	TP502	K – 9	
FL504	H – 7	IC516	G-12	Q305	* D – 8 * E – 8	Q 5 3 3 Q 5 3 4	* J - 8	RV301	E - 8	TP503	L - 9	
FL505	G-9	IC517	G-13	Q307	* E – 8	Q534 Q535	* H – 7 * H – 8	©RV401 RV402	E-9	TP504	L-12	
		IC518	H-13	Q308	* E - 7	Q536	* G - 8	©RV403	E – 10 E – 10	TP505 TP506	K-13 L-13	
IC1	B - 8	IC519	H-13	Q309	* D ~ 7	Q537	* G - 8	RV404	E-14	TP507	L-13	
IC2	B – 7	IC520	H-11	Q311	* E - 7	Q538	* G - 8	RV406	F-12	TP508	J - 7	
IC3	C – 8	IC521	H-12	Q312	* F - 7	Q540	* K - 10	R V 5 0 4	L-10	TP509	G - 7	
IC4	B – 8	IC522	H – 13	Q313	* D – 8	Q541	* K – 10	RV506	L-11	TP510	J - 8	
I C 5	A - 9	10523	J – 1 1	Q315	* E – 8	Q542	* K – 10	RV507	K – 14	TP511	G -8	
I C 6	A – 9	IC524	J-13	Q316	* F - 8	Q 5 4 5	* G 11	R V 5 0 8	K – 14	TP512	J - 9	
I C 7 I C 8	B - 9 C - 10	IC525	K-11	©Q401	* E - 10	Q546	* G - 12	RV509	K – 14	TP514	G - 13	
I C 9	C-10	I C 5 2 6 I C 6 0 1	J – 9 K – 2	Q 4 0 2 Q 4 0 3	* E - 9	Q548	* G – 12	RV511	H – 7	TP515	G - 12	
IC 10	A – 11	IC602	J - 2	©Q404	* D – 10 * E – 10	Q549	* G – 13	RV512	H – 8	TP516	H - 13	
IC11	C-13	IC603	H-1	©Q404	* D – 11	Q 5 5 1 Q 5 5 3	* G – 11 * H – 12	©RV513 RV514	H - 7	TP517	H - 12	
IC12	B-13		,	Q406	* D – 11	Q553 Q554	*H-12	RV514	H – 8 G – 1 1	TP518 TP519	J – 13	
IC13	C-12	JR1	* A – 1 1	©Q407	*E-11	Q556	* J – 10	RV516	H = 14	TP519	J - 12 J - 13	
IC14	A – 12	⊚JR2	* A – 10	Q408	* D – 11	Q557	*H-11	RV518	H-11	11.020	U - 13	-
IC15	A-12	JR3	* J – 1 0	Q409	* E – 11	Q558	* J – 1 1	RV520	J – 14	VCO1	B - 10	
IC16	A – 13	⊚JR4	* J – 10	Q410	*F-12	Q560	* H – 12	RV521	H-11	VCO2	A - 10	
IC17	B-11	_	* J - 10	Q411	* F – 12	Q561	* H – 13	RV522	J – 14	<del>-</del>		
I C 18	. C-11	⊚JR6	* J – 10	Q413	* E – 12	Q563	* J – 1 0	RV523	J – 1 1	*:SOLDE	ERING S	SIDE
IC19	A-13	JR7	* C-11	Q414	* E – 12	Q564	* J – 11	R V 5 2 4	J – 14			
C 2 0	C-8	JR9	* C - 1 1	Q415	* D – 12	Q565	* J – 1 1	RV525	H – 10	⊚:EK ON	1LY	

SY-172; System Control

SY-172(1-644-597-11)									
BT1	C - 2	IC36	M - 9						
		IC37	M - 8						
CNI1	B – 5	1C38	M-8						
CN12	D – 5	IC39	M-7						
CN13	B – 7	IC40	G - 3						
CN14	D – 7	IC 4 1	F – 4						
CN15	B – 8	I C 4 2	H – 4						
CN16	D – 8	IC 4 3	F – 2						
CN17	B - 9	IC 4 4	F ~ 4						
CN18	D - 9	1 C 4 5	H – 4						
••	- 0	IC 4 6	H – 2						
CN16	N - 3	IC 47	J – 4						
CN18	N - 10	IC48	J – 5						
		IC49	F - 1						
D 1	B - 3	IC 5 0	H ~ 5						
		IC 5 1	K – 4						
E 1	H-10	IC52	K – 3						
E 2	H - 3	IC53	K – 2						
E 3	K – 8	IC 5 4	K - 1						
E 4	L - 1	IC 5 5	K – 6						
E 5	M - 8	IC 5 6	D - 3						
_ •	•	IC 5 7	M - 2						
I C 1	B – 5	I C 5 8	M - 3						
I C 2	D - 5	IC 5 9	B – 4						
I C 3	B - 7	IC 6 0	D – 4						
I C 4	D – 7	I C 6 1	B - 3						
I C 5	B - 8	I C 6 2	D - 3						
I C 6	D - 8	IC 63	C-3						
1 C 7	B - 9	IC 6 4	K-10						
1 C 8	D – 9								
I C 9	H – 10	PS1	N - 4						
IC10	J-10								
IC11	H – 9	Q 1	B-3						
IC12	F – 9								
IC13	D - 10	RB1	A – 3						
IC14	H ~ 9	RB2	A - 3						
IC 15	F – 7	RB3	M-7						
IC16	F – 7	RB4	K-10						
IC17	J – 8								
IC18	F – 8	S 1	A – 4						
IC 19	H – 7	S 2	A - 3						
IC20	H – 8	S 3	L-10						
IC21	H – 7								
IC22	J – 7	TP1	H-10						
1 C 2 3	B – 10	TP2	H-3						
I C 2 4	D – 10	TP3	J – 8						
IC25	M – 6	TP4	L – 1						
IC26	J – 6	TP5	M-7						
IC27	K – 6	X 1	J – 11						
IC28	K – 7	X 2	J – 3						
IC29	J - 9								
IC30	J - 9								
IC31	M ~ 1 1								
IC32	J – 7								
IC33	K – 7								
IC34	M – 10								
IC35	M – 9								

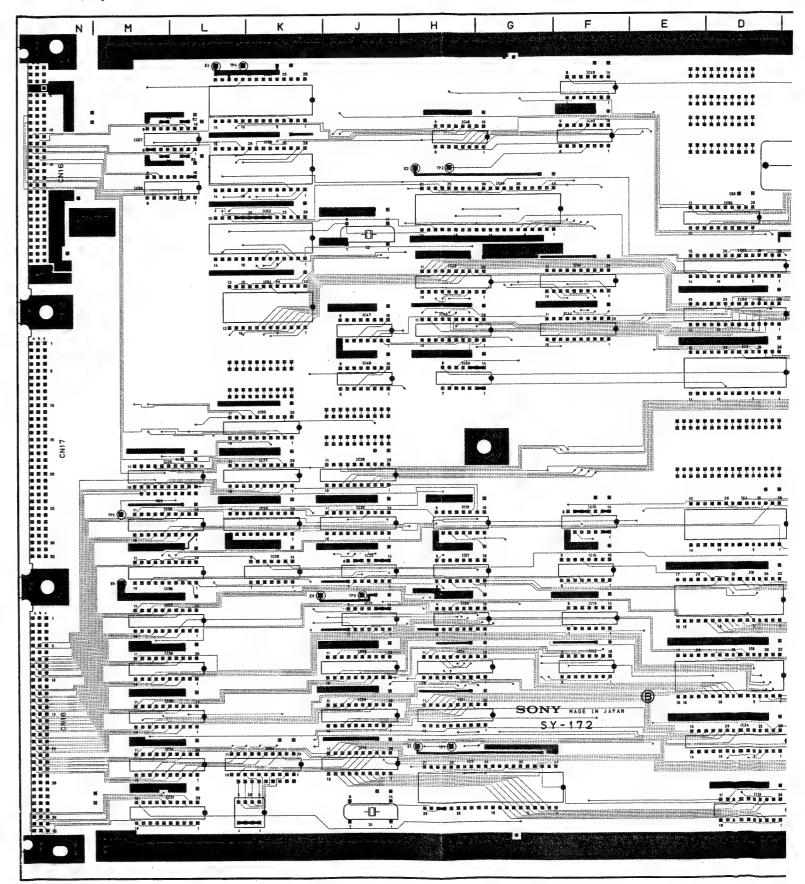


SY-172-A 1-644-597-11 DFS-500/500 P

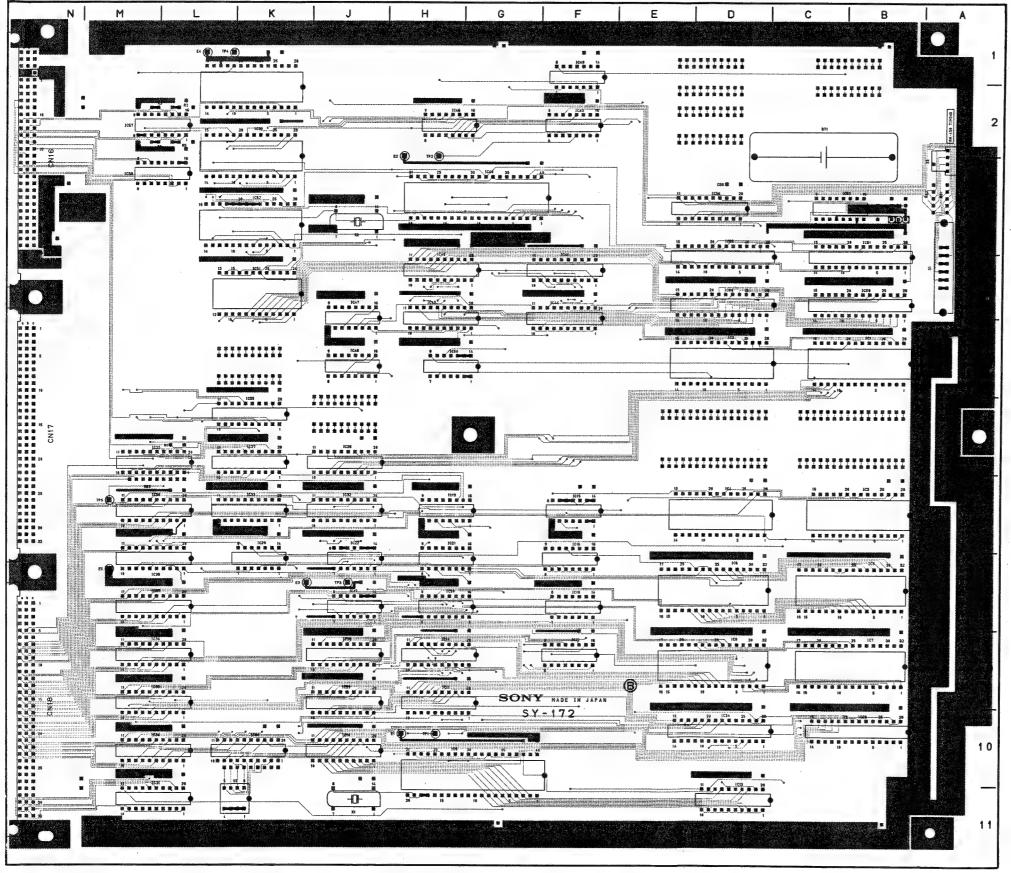


SY-172-A SIDE-1-644-597-11 DFS-500/500P

SY-172; System Control



SY-172; System Control

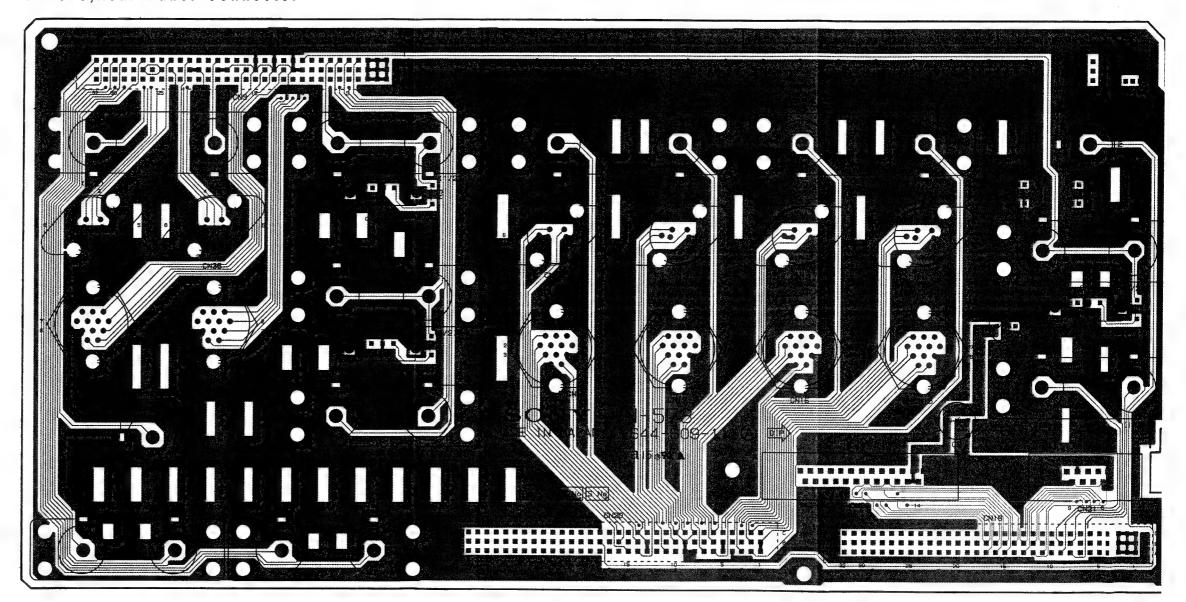


SY-172(1-644-597-11) IC36 BT1 C-2 M = 9IC37 M - 8 CNI1 B-5IC38 M - 8CN12 D - 5 IC39 M-7CN13 B-7IC40 G = 3CN14 D - 7 IC41 CN15 B - 8 IC42 H - 4CN16 D - 8 IC43 CN17 B-9 IC44 F-4 CN18 D - 9 IC45 H-4IC46 H = 2CN16 N-31C47 J-4ÇN18 N - 10 IC48 J - 5 IC49 F - 1 D 1 IC50 H – 5 IC51 K – 4 E 1 H-10 IC52 K - 3 E 2 H = 3IC53 K-2E 3 K – 8 IC54 K-1E 4 L - 1 IC 5 5 K - 6 E 5 M - 8 IC56 D-3M-2IC57 IC1 B - 5 IC58 M - 31 C 2 D - 5 IC 59 B - 4 IC3 B - 7 IC60 D - 4 IC4 D-7IC 61 B - 3IC5 B ~ 8 IC62 D-3IC6 D - 8 IC63 C = 3IC7 B - 9IC64 K - 101 C 8 D - 9 IC9 H - 10PS1 N - 4 IC10 J - 10IC11 H-9 Q1 B - 3IC12 F - 9 IC13 D - 10RB<sub>1</sub> A - 3IC14 H - 9 RB2 A - 3 IC15 F - 7 BB3 M = 7IC16 F - 7 K-10 IC17 J - 8 IC18 F - 8 S 1 A - 4 IC19 H-7 A - 3S 2 IC20 H - 8 L-10 IC21 H-7 IC22 .1 - 7 TP1 H - 10IC23 B - 10TP2 H - 3IC24 D - 10TP3 J - 8 IC25 M - 6 TP4 L - 1 IC 26 J - 6 TP5 M - 7 IC27 K ~ 6 J-11 X 1 IC28 K - 7X 2 J - 3IC29 J - 9 IC30 J - 9 IC31 M - 11IC32 .1 - 7 IC33 K – 7 IC34 M - 10IC35 M - 9

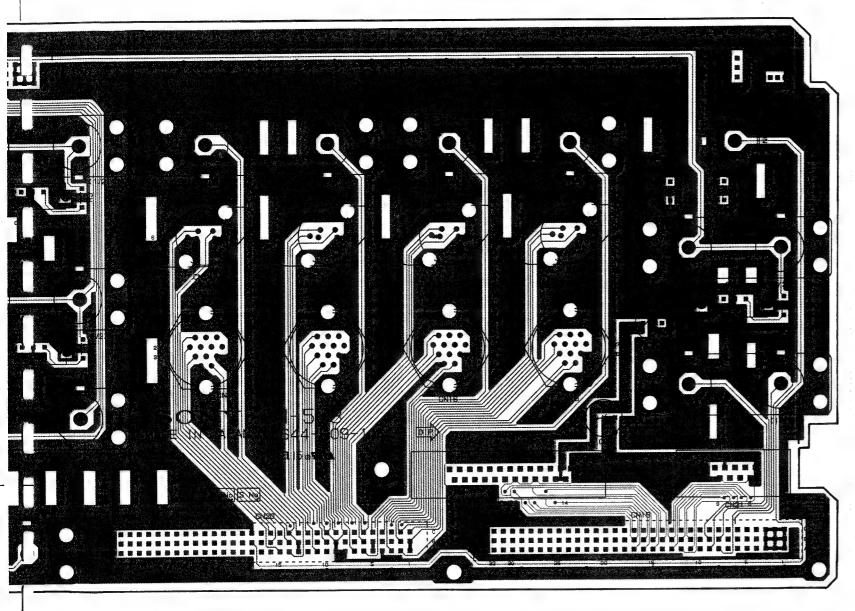
**SY-172-B** SIDE-1-644-597-11 DFS-500/500P

CN-573; Rear Panel Connector

E - 3 A - 1 E - 2 E - 1 D - 2 E - 1 D - 2 C - 2 D - 3 D - 3 C - 3 D - 5 C - 4 B - 4 B - 4 B - 4 B - 4						
E - 2 E - 1 D - 2 E - 2 D - 2 E - 2 D - 2 E - 2 D - 2 E - 2 D - 2 E - 2						
E - 1 D - 2 C - 2 D - 2 D - 2 C - 2 D - 3 D - 3 C - 3 D - 3 C - 3 D - 5 C - 4 D - 4 B - 4 B - 4						
D - 2 C - 2 D - 2 D - 2 C - 2 C - 2 C - 2 C - 3 D - 3 C - 3 C - 3 D - 5 C - 4 D - 4 B - 4 B - 4						
C - 2 D - 2 D - 2 C - 2 D - 3 D - 3 C - 3 D - 5 C - 4 D - 4 B - 4						
D - 2 D - 2 C - 2 D - 3 D - 3 C - 3 C - 5 C - 4 D - 4 B - 4						
D - 2 C - 2 D - 3 D - 3 C - 3 C - 3 C - 5 C - 5 C - 4 D - 4 D - 3						
C - 2 C - 2 D - 3 D - 3 C - 3 D - 5 C - 4 D - 4 B - 4						
C - 2 D - 3 D - 3 C - 3 C - 3 D - 5 C - 4 D - 4 B - 4						
D - 3 D - 3 C - 3 C - 5 C - 5 C - 4 D - 4 B - 4						
D - 3 C - 3 C - 3 D - 5 C - 5 C - 4 D - 4 B - 4						
C - 3 C - 3 D - 5 C - 5 C - 4 D - 4 B - 4						
C - 3 D - 5 C - 5 C - 4 D - 4 B - 4						
D - 5 C - 5 C - 4 D - 4 B - 4						
C - 5 C - 4 D - 4 B - 4 B - 3						
C - 4 D - 4 B - 4 B - 3						
D – 4 B – 4 B – 3						
B – 4 B – 3						
B – 3						
0 – 2						
3 – 5						
5 – 5 A – 5						
4 – 3 4 – 4						
4 – 2						
\ _ 2						
4 – 2						
3 – 2						
֡	A - 3 A - 3 E - 1 E - 3 B - 3	A - 3 A - 3 E - 1 E - 3 B - 3	A - 3 A - 3 E - 1 E - 3 B - 3	A - 3 A - 3 E - 1 E - 3 B - 3	A - 3 A - 3 E - 1 E - 3	A - 3 A - 3 E - 1 E - 3 B - 3

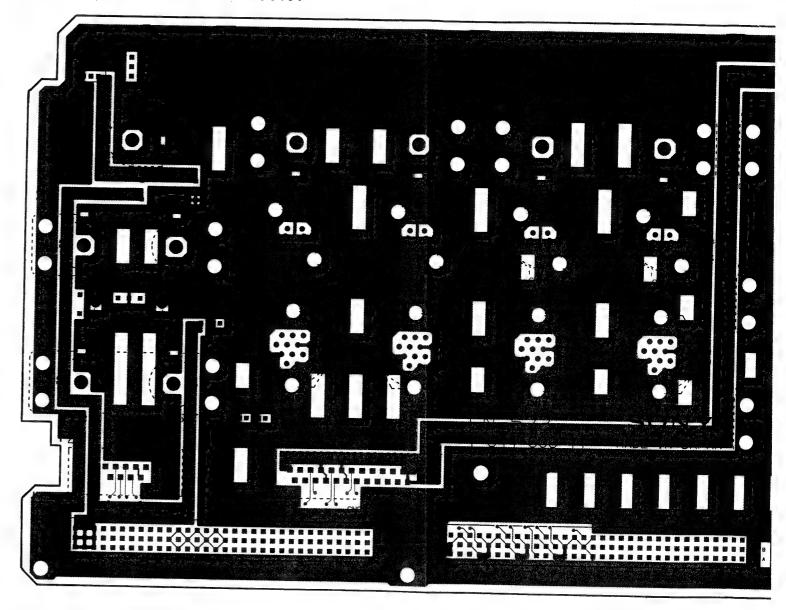


CN-573 -A SIE



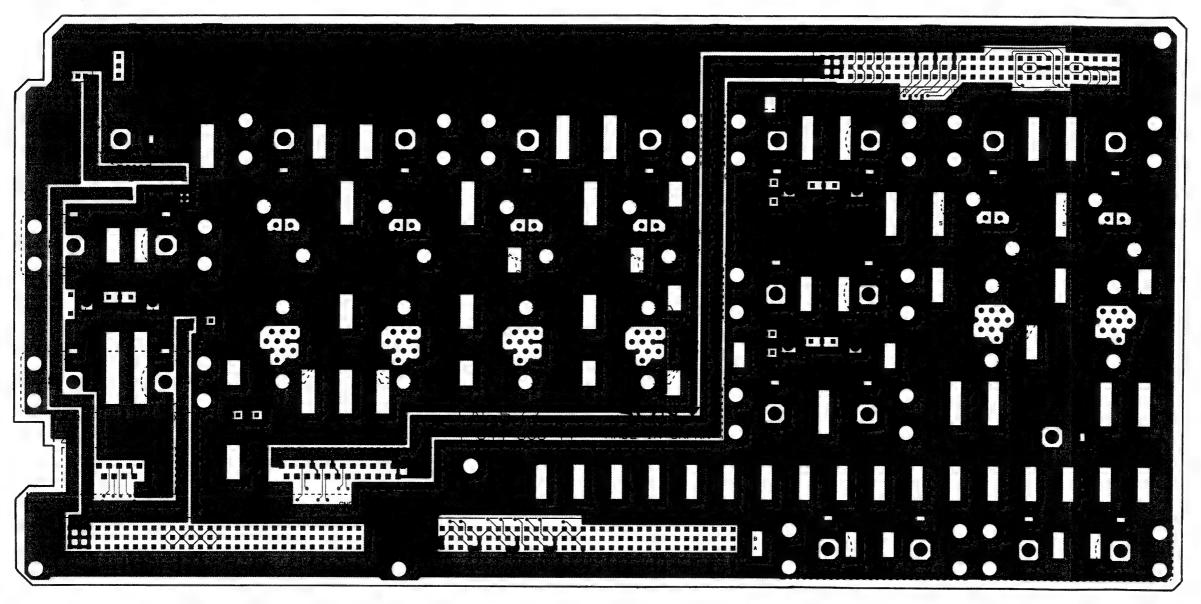
CN-573 -A SIDE-1-644-609-11 DFS-500/500P

CN-573; Rear Panel Connector



INIT CN - 573

CN-573; Rear Panel Connector

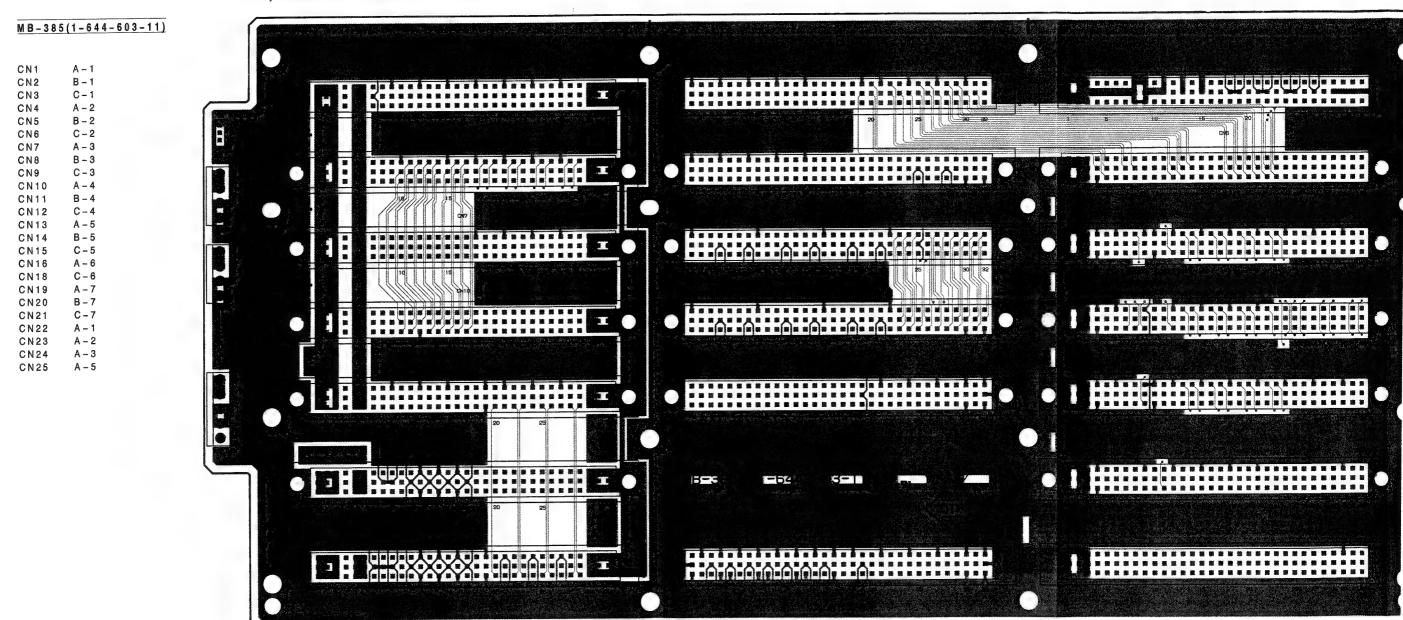


CN-573(1-644-609-11) CN1 E - 3 CN3 \* A – 1 E – 2 CN4 CN6 E - 1 CN7 D - 2 CN9 C - 2 CN11 D - 2 CN12 D - 2 CN13 C - 2 CN14 C - 2 CN15 CN16 D - 3CN17 C-3 CN18 C-3 CN19 \* D - 5 CN20 \* C - 5 CN21 CN22 D - 4 CN23 CN25 B ~ 3 CN27 B-2CN29 B - 5 CN31 CN33 A – 4 CN34 A – 2 CN36 A - 2 CN37 A – 2 CN38 A - 3 CN39 A – 3 CN40 \* E – 1 E - 3 S 2 B - 3B - 2 \*: SOLDERING SIDE

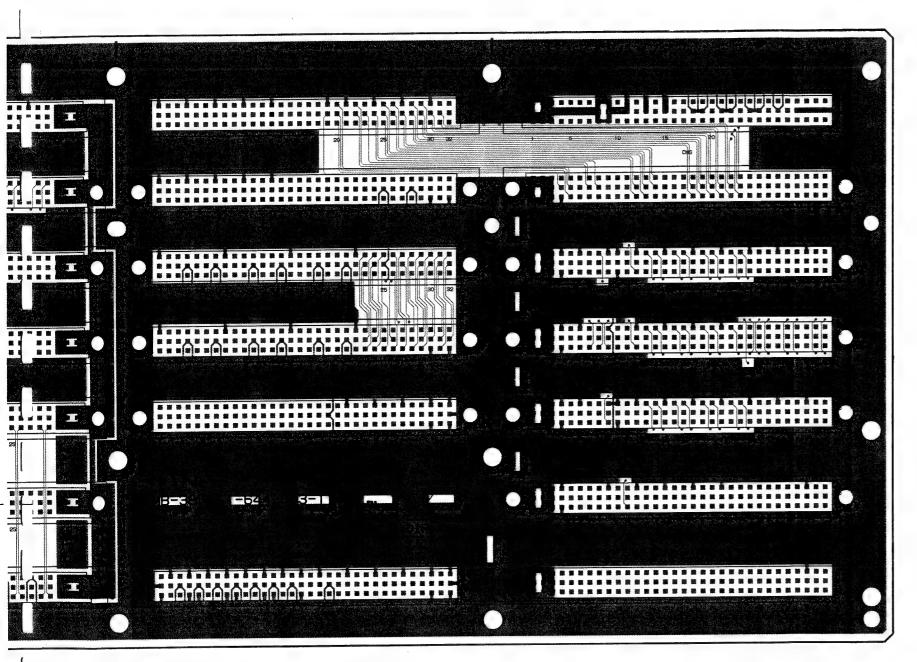
CN-573 -B SIDE-

1-644-609-11 DFS-500/500P

MB-385; Mother Board

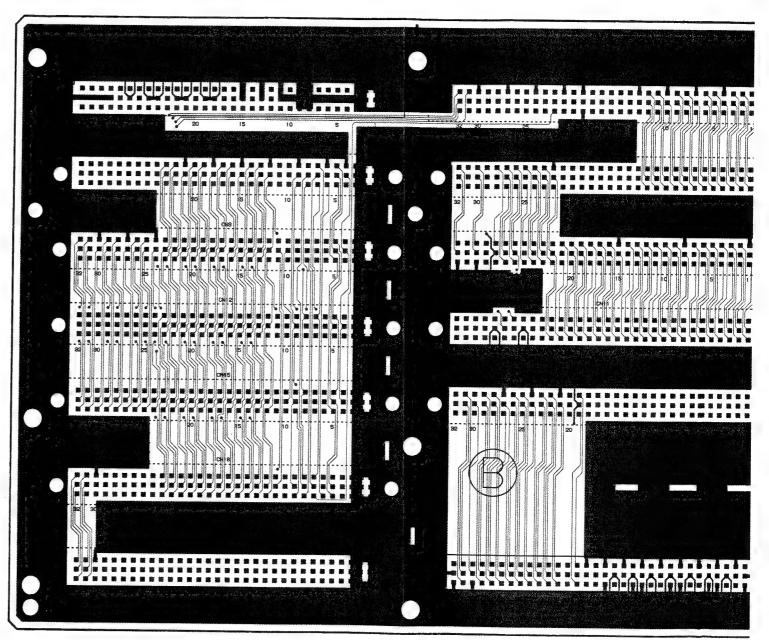


MB-385 -A SI



MB-385-A SIDE-1-644-603-11 DFS-500/500P

MB-385; Mother Board



MB-385(1-644-603-11)

A - 1

B - 1

C - 1

A – 2 B – 2

C - 2

A - 3

B - 3

C - 3

A - 4

B - 4

C-4

B ~ 5

C-5

A - 6

A - 7

B-7

C - 7

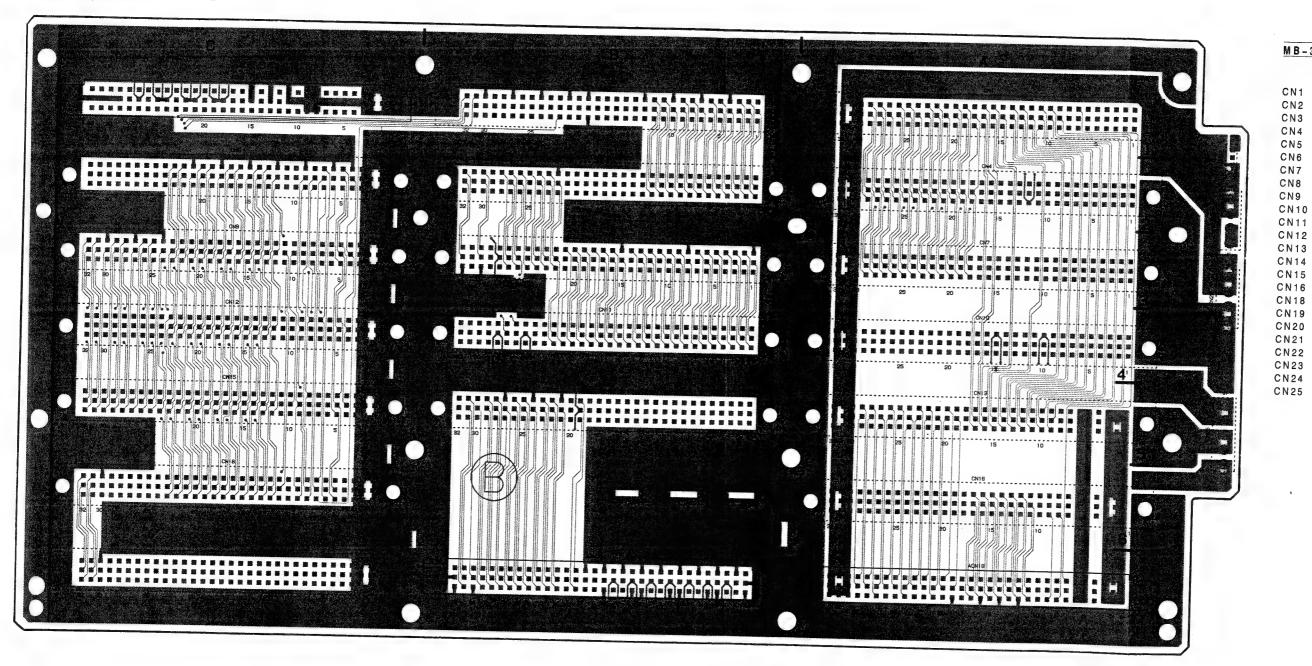
A - 1

A - 2

A - 3

A – 5

MB-385; Mother Board

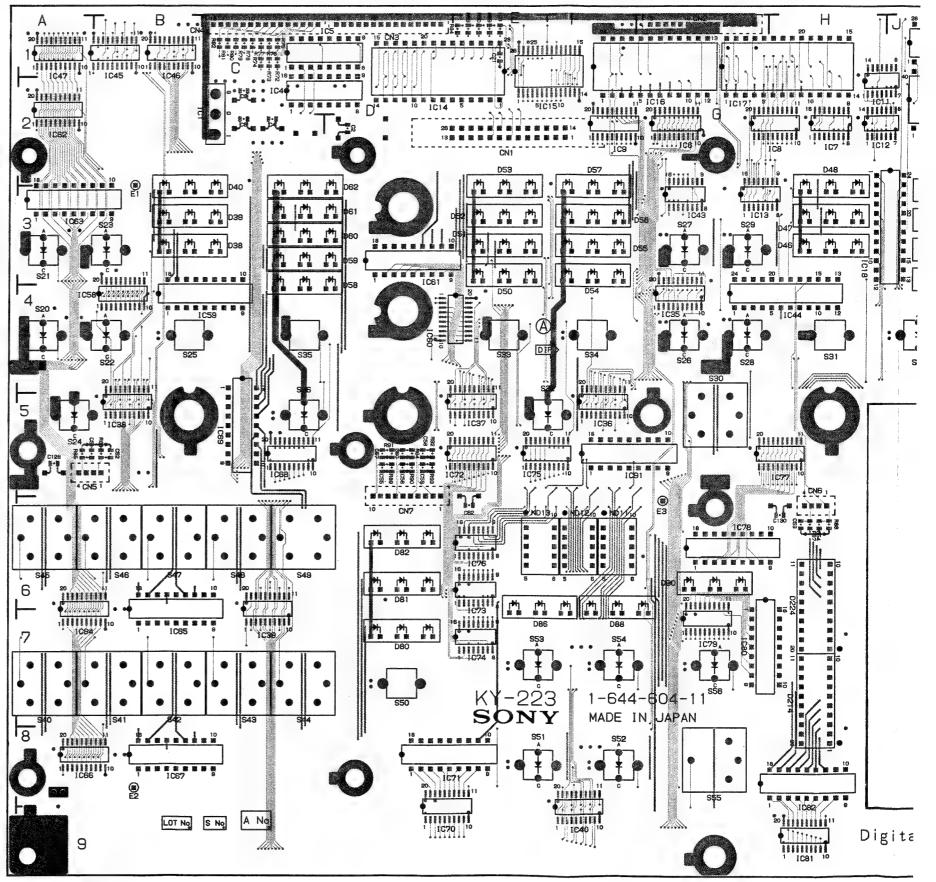


MB-385 -B SIDE-

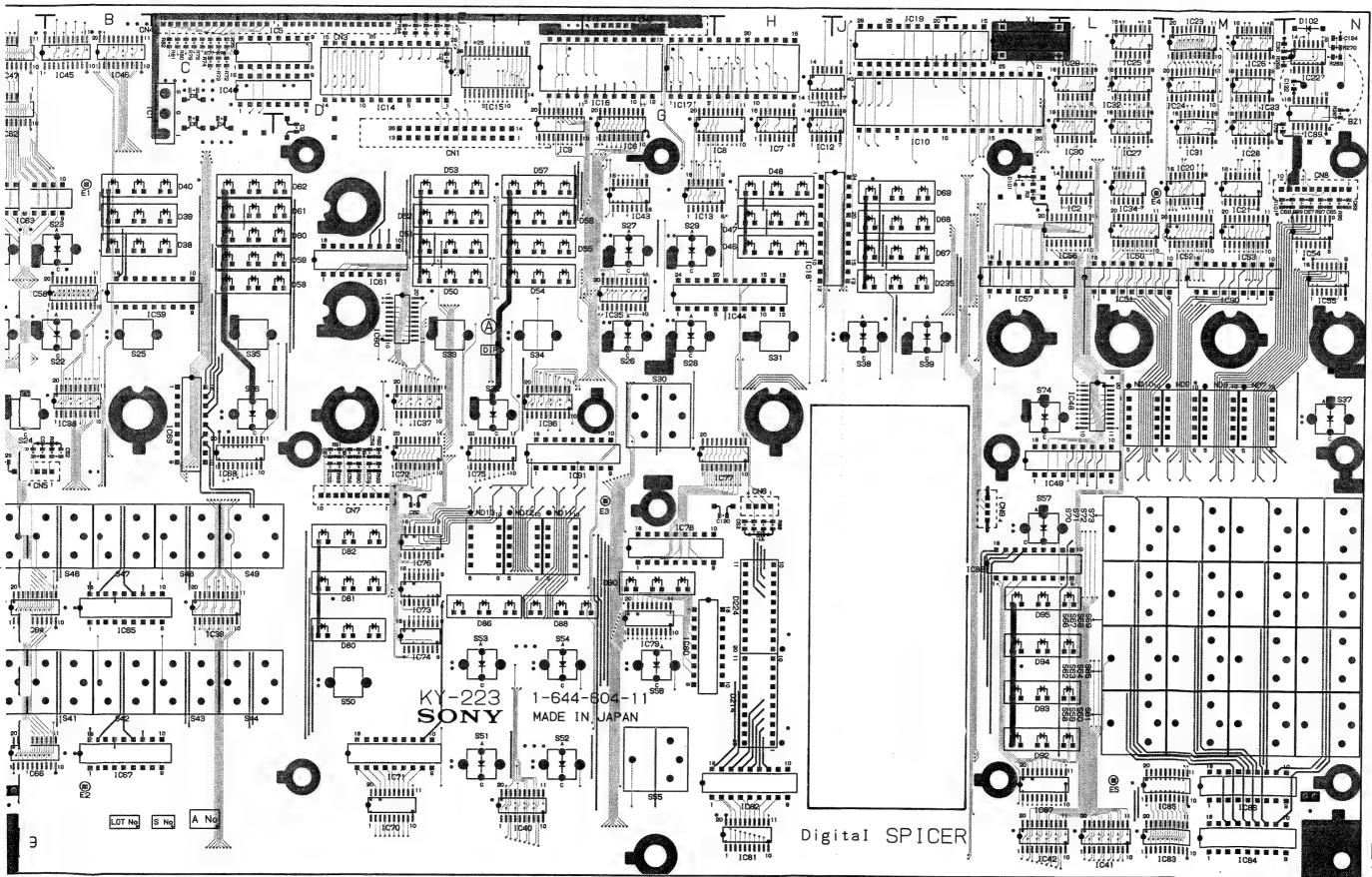
n. 17

#### KY-223; Function Key

K Y - 22	3 (1 - 6 4 4 -	604-11)							Α
									20
B Z 1	* M - 2	I C 6	G-2	I C 6 9	C - 5	S 4 9	C-6		1 <b>•</b>
		I C 7	H – 2	1 C 7 0	E – 8	S 5 0	D-7		
CNI14	* D – 2	I C 8	H - 2	IC71	E – 8	S 5 1	E - 8		
0.114		I C 9	F - 2	IC72	E-5	S 5 2	F – 8		20
CN1	* E – 2 * H – 1	IC10 IC11	J – 2 H – 2	1 C 7 3 1 C 7 4	E – 7 E – 7	S 5 3 S 5 4	E – 7 F – 7		_ •
CN2 CN3	* E – 1	IC 1 2	H-2	1C75	E - 5	S 5 5	G-8		2111
CN4	* C - 1	IC 13	G-3	1076	E – 6	S 5 6	G – 7		
CN5	* A – 5	IC 14	* D - 2	I C 7 7	H – 5	S 5 7	K – 5		
CN6	* H – 6	IC 15	F – 2	I C 7 8	G - 6	S 5 8	L – 7		
CN7	* D – 5	IC 16	G-2	IC79	G-7	S 5 9	L - 7		18
CN8	* N - 3	IC17	G-2	IC80	G-7	S 6 0	L – 7		•
CN9	* K - 6	IC18	H – 3	IC81	H – 9	S 6 1	L – 7		5 5
		IC 19	J – 1	I C 8 2	H – 8	S 6 2	L - 7		3,
38	C – 3	IC20	M – 2	I C 8 3	M – 9	S 6 3	L - 7		
39	C – 3	IC 2 1	M – 3	IC84	M – 9	S 6 4	L – 7		T
040	C-3	1022	N – 1	I C 8 5	M – 8	S 6 5	L – 7		C.
046	H-3	1023	M - 1	IC86	M – 8	S 6 6	L – 7		S21
047 048	H – 3 H – 2	1 C 2 4 1 C 2 5	M – 2 L – 1	1 C 8 7 1 C 8 8	K – 8 K – 6	S 6 7 S 6 8	L – 7 L – 7		4
) 4 8 ) 5 0	п-2 Е-4	IC 2 6	M – 1	1 C 8 9	N - 2	S 6 9	L - 7		S20
) 5 1	E - 3	IC 2 7	L – 2	IC90	M – 4	S 7 0	L - 6		<b> </b>
52	E - 3	IC 2 8	M - 2	I C 9 1	G - 5	S 7 1	L – 6		¥
53	E - 2	I C 2 9	L - 1			S 7 2	L - 6		
54	F – 4	IC30	L - 2	ND7	M – 4	S 7 3	L - 6		
55	G - 3	IC31	M-2	ND8	M - 4	S 7 4	K – 4		
56	G – 3	IC32	L - 2	ND9	M – 4				l — ]
57	F – 2	IC33	M-2	N D 1 0	L - 4	X 1	K – 1		5
58	D – 3	IC34	L – 3	ND11	F – 6				
59	D – 3	IC35	G – 4	ND12	F - 6	* :SOL	DERING	SIDE	
060	D - 3	IC36	F-5	N D 1 3	E – 6				
061	D – 3 D – 3	1 C 3 7 1 C 3 8	E – 5 B – 5	PS1	* D – 2				
062 067	J - 3	IC 3 9	C-7	F 3 1	* D-2				
068	J – 3	IC 4 0	F - 9	S 2 0	A - 4				100100000
069	J – 3	I C 4 1	L – 9	S 2 1	A – 3				11
080	D - 7	I C 4 2	K – 9	S 2 2	B – 4				•
81	D – 6	IC43	G-3	S 2 3	B-3				
82	D - 6	IC 4 4	H – 4	S 2 4	A – 5				
086	E – 7	IC 45	B – 1	S 2 5	B – 4				
88	F – 7	IC 4 6	B – 1	S 2 6	G – 4				S45
90	G – 6	IC 47	A – 1	S 2 7	G – 3				6 "
92	K – 8	IC 48	L - 5	S 2 8	G – 4				l
093	K – 7 K – 7	I C 4 9 I C 5 0	K – 5 L – 3	S 2 9 S 3 0	G – 3 G – 4				1
094 095	K – 7 K – 7	IC 5 0	L – 3 L – 4	S 3 1	G – 4 H – 4				Ð
D 1 0 1	K – 7 K – 2	1C51	M - 3	S 3 2	F - 4				,
0102	N – 1	1052	M - 3	S 3 3	E - 4				•
0214	H – 7	IC 5 4	N - 3	S 3 4	F – 4				
0224	H – 6	IC 5 5	N – 4	835	C – 4				
235	J – 3	IC 5 6	L - 3	S 3 6	C - 5				•
Ε1	B - 3	IC 57	K – 4	S 3 7	N - 5				940
Ē 2	B - 8	IC 58	A – 4	S 3 8	J - 4				8
3	G - 6	IC 5 9	C - 4	S 3 9	J – 4				- C
E 4	L - 3	IC 6 0	D - 4	S 4 0	A - 7				
E 5	L – 8	IC 61	D - 3	S 4 1	B – 7				
0.4	п ^	IC 6 2	A - 2	S 4 2	B - 7				
C 1	B - 2	IC 6 3	A - 3	S 4 3 S 4 4	C – 7 C – 7				
I C 2 I C 3	L – 3 * K – 3	I C 6 4 I C 6 5	A – 7 B – 7	S 4 4 S 4 5	A – 6				
C 4	* K = 3 C = 2	1066	A – 8	S 4 6	B - 6				
I C 5	D – 1	1067	B - 8	S 4 7	B - 6				
		IC 68	C-5	S 4 8	C-6				
					_				

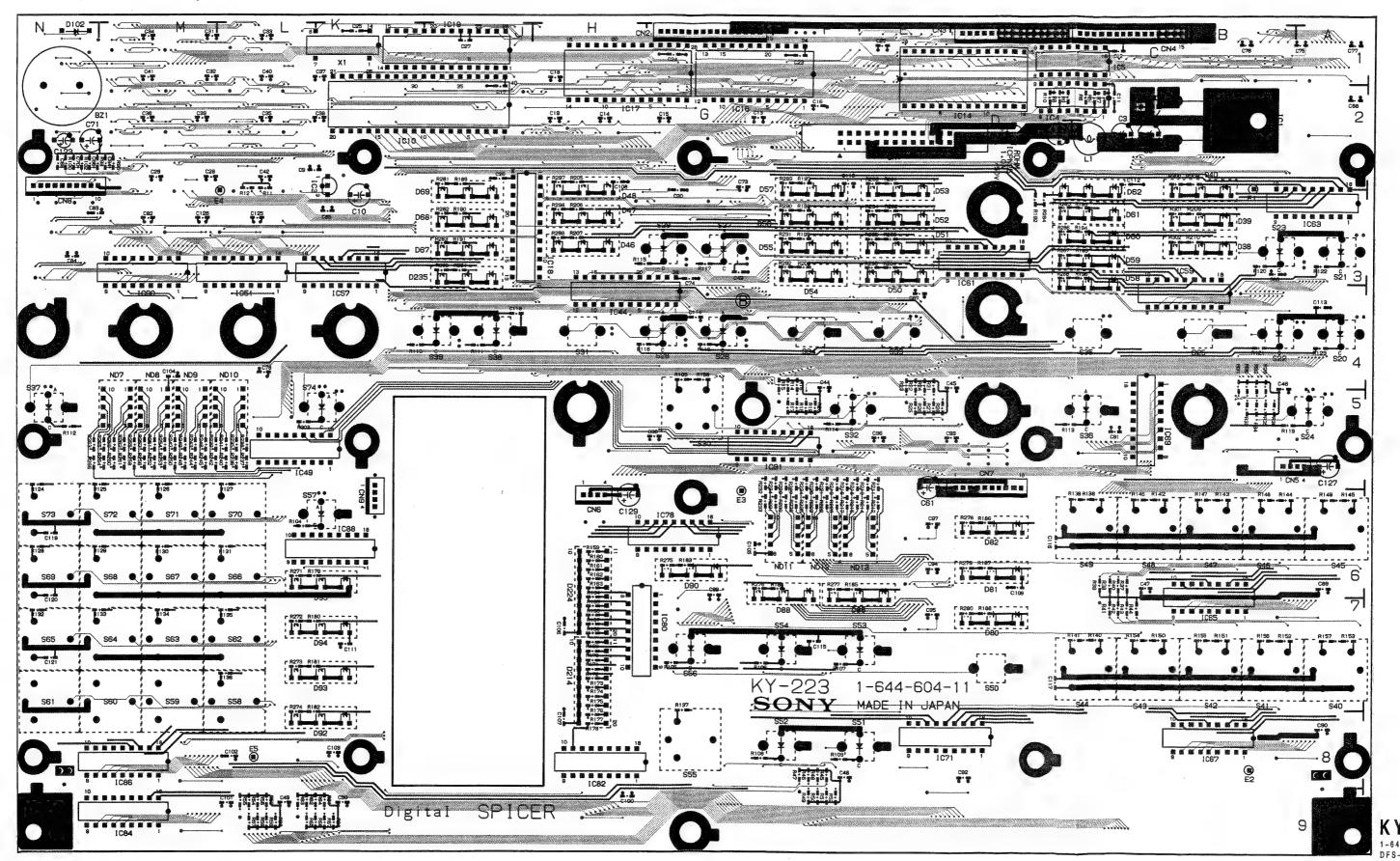


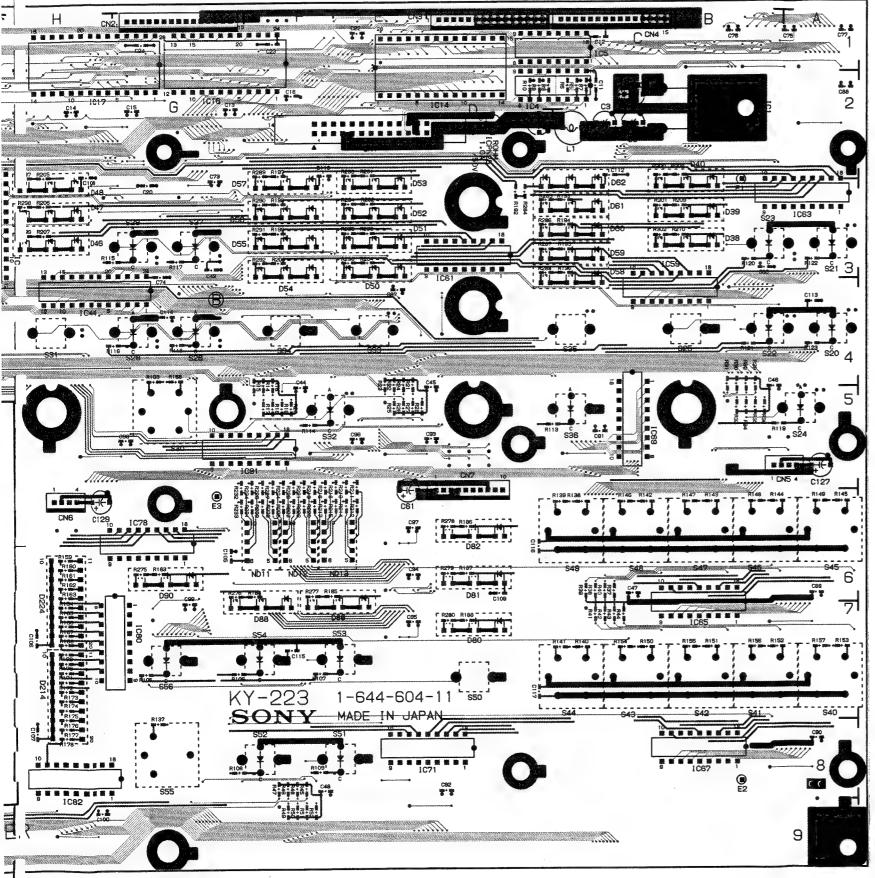
## 2 ; Function Key



**KY-223** -A SIDE-1-644-604-11 DFS-500/500P

KY-223; Function Key





- V V 00	0/4 044	004 44						
K Y - 22	3 (1 - 644	-604-11)						
5.74		100	0.0	1000	0.5	0.40	0.6	
BZ1	* M – 2	1 C 6 1 C 7	G – 2 H – 2	1 C 6 9 1 C 7 0	C – 5 E – 8	S 4 9 S 5 0	C - 6 D - 7	
CNI14	* D – 2	107	H-2	1070	E - 8	S 5 1	E - 8	
CHITT		I C 9	F - 2	1072	E - 5	S 5 2	F - 8	
CN1	* E - 2	IC10	J - 2	IC73	E - 7	S 5 3	E - 7	
CN2	* H-1	IC 11	H – 2	I C 7 4	E - 7	S 5 4	F - 7	
CN3	* E - 1	IC 12	H - 2	IC75	E – 5	S 5 5	G – 8	
CN4	* C - 1	IC 13	G – 3	IC76	E – 6	S 5 6	G – 7	
CN5	* A – 5		* D – 2	1 C 7 7	H – 5	S 5 7	K – 5	
CN6	* H - 6		F – 2	I C 7 8	G - 6	S 5 8	L – 7	
CN7	* D – 5		G-2	IC79	G – 7	S 5 9	L - 7	
CN8	* N - 3	IC 17	G – 2	I C 8 0	G-7	S 6 0 S 6 1	L - 7	
CN9	* K – 6	IC 1.8 IC 1.9	H – 3 J – 1	I C 8 1 I C 8 2	H – 9 H – 8	S 6 2	L – 7 L – 7	
D38	C-3	1020	M-2	1082	M – 9	S 6 3	L - 7	
D39	C-3	I C 2 1	M - 3	I C 8 4	M - 9	S 6 4	L - 7	
D 4 0	C-3	I C 2 2	N – 1	IC85	M - 8	S 6 5	L – 7	
D 4 6	H - 3	IC23	M - 1	1C86	M – 8	S 6 6	L – 7	
D 4 7	H – 3	1 C 2 4	M - 2	1 C 8 7	K – 8	S 6 7	L ~ 7	
D 48	H-2	1 C 2 5	L - 1	IC88	K – 6	S 6 8	L – 7	
D 5 0	E - 4	IC 26	M – 1	IC89	N - 2	S 6 9	L - 7	
D 5 1	E – 3	I C 2 7	L – 2	IC 9 0	M – 4	S 7 0	L - 6	
D 5 2	E-3	1028	M-2	I C 9 1	G – 5	S71	L-6	
D 5 3	E - 2	IC 2 9	L – 1	ND7	M – 4	S 7 2 S 7 3	L – 6 L – 6	
D 5 4 D 5 5	F – 4 G – 3	1 C 3 0 1 C 3 1	L – 2 M – 2	ND7 ND8	M – 4	S74	K - 4	
D 5 6	G-3	1031	L - 2	ND9	M – 4	0,4	Ι Τ	
D 5 7	F - 2	1 C 3 3	M - 2	ND10	L – 4	X 1	K – 1	
D 5 8	D-3	1 C 3 4	L - 3	N D 1 1	F - 6			
D 5 9	D - 3	1 C 3 5	G – 4	N D 1 2	F – 6	*:SOL	DERING	SID
D60	D - 3	1 C 3 6	F – 5	N D 1 3	E – 6			
D 6 1	D - 3	1 C 3 7	E - 5					
D 6 2	D – 3	1 C 3 8	B - 5	PS1	* D – 2			
D 6 7	J – 3	1 C 3 9	C-7	0.00	A - 4			
D 6 8 D 6 9	J – 3 J – 3	1 C 4 0 1 C 4 1	F – 9 L – 9	S 2 0 S 2 1	A - 3			
D80	D-7	1041	K – 9	S 2 2	B – 4			
D 8 1	D - 6	IC 43	G - 3	\$23	B – 3			
D82	D - 6	IC44	H – 4	S 2 4	A – 5			
D86	E - 7	IC 45	B – 1	S 2 5	B - 4			
D88	F - 7	IC 46	B – 1	S 2 6	G – 4			
D90	G - 6	IC 47	A - 1	S 2 7	G – 3			
D 9 2	K – 8	IC 48	L – 5	S 2 8	G – 4			
D93	K – 7	IC 49	K – 5	S 2 9	G - 3			
D 9 4	K-7	1050	L – 3	S 3 0	G – 4			
D95 D101	K – 7 K – 2	I C 5 1 I C 5 2	L - 4 M - 3	S 3 1 S 3 2	H – 4 F – 4			
D101	N – 1	1052	M – 3	\$33	E - 4			
D 2 1 4	H – 7	I C 5 4	N - 3	S 3 4	F - 4			
D 2 2 4	H - 6	IC55	N - 4	S 3 5	C - 4			
D235	J - 3	IC56	L - 3	S 3 6	C - 5			
E 1	B – 3	IC 57	K – 4	S 3 7	N - 5			
E 2	B - 8	IC 58	A – 4	S 3 8	J – 4			
E 3	G-6	IC 5 9	C – 4	S 3 9	J – 4			
Ē 4	L – 3	1060	D-4	\$40	A – 7			
E 5	L – 8	I C 6 1 I C 6 2	D – 3 A – 2	S 4 1	B – 7 B – 7			
		1002		S 4 2				
LC 1	B ~ 2	1063	A = 3	543	C-7			
I C 1 I C 2	B ~ 2 L ~ 3	1 C 6 3	A – 3 A – 7	S 4 3 S 4 4	C – 7 C – 7			
IC1 IC2 IC3	B - 2 L - 3 * K - 3	1 C 6 3 1 C 6 4 1 C 6 5	A – 3 A – 7 B – 7	S 4 3 S 4 4 S 4 5	C – 7 C – 7 A – 6			
IC 2	L, - 3	IC64	A ~ 7	S 4 4	C – 7			

KY-223 -B SIDE-1-644-604-11

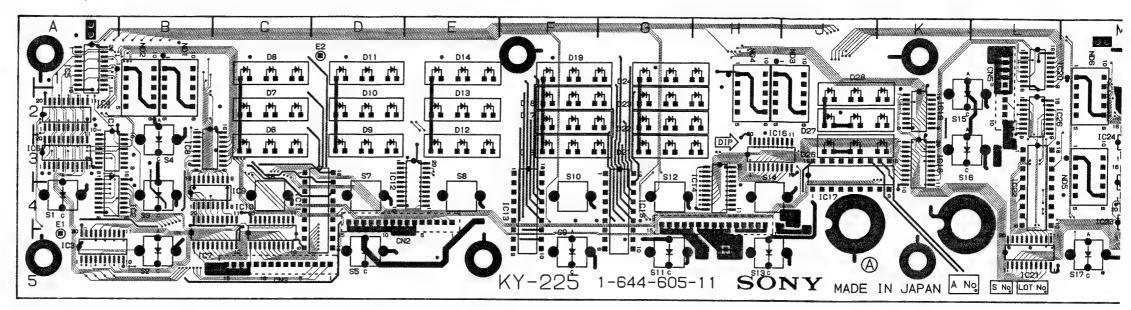
I C 5

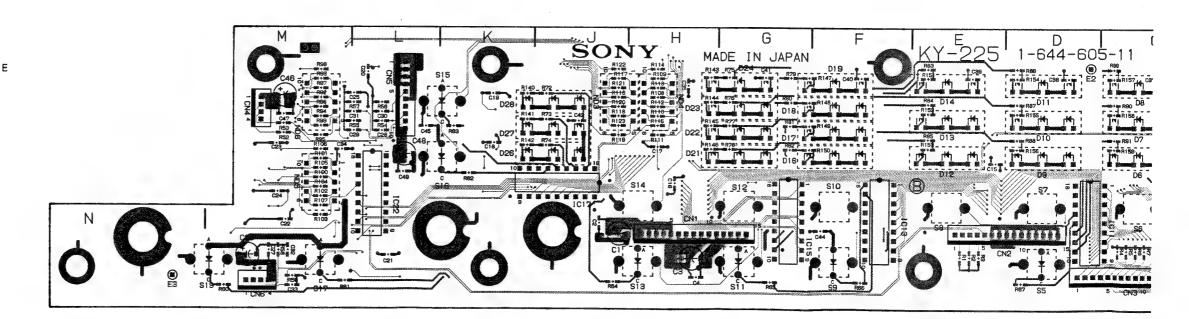
IC 68

S 48

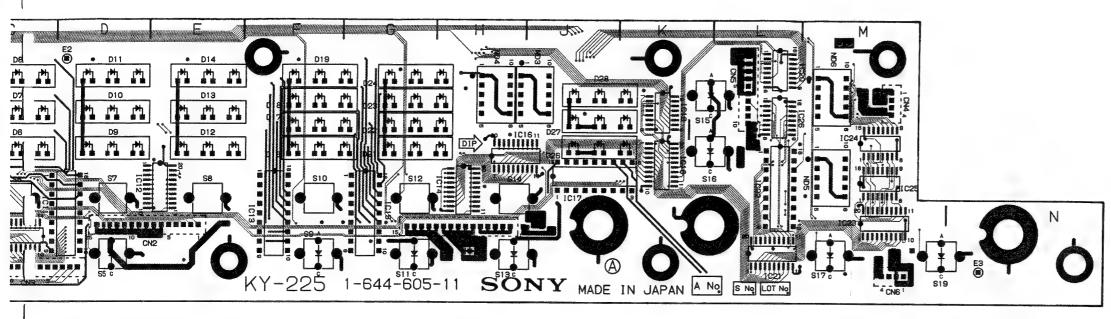
KY-225(1-644-605-11) CN1 \* H - 4 IC22 L - 3 CN2 \* E - 5 IC23 M-4M-3CN3 \* C - 5 IC24 \* M-2 IC26 L – 2 CN5 \* L – 1 \* M - 5 B – 1 ND2 B - 2 D 7 C - 2 ND3 J – 1 ND4 C – 1 H - 1 D 9 D - 3 ND5 M - 3D10 D - 2 ND6 M-1D - 1 D 1 1 E – 3 D12 E - 2 D13 S 3 B - 4 D 14 E – 1 S 4 F - 3 F - 2 S 5 D17 D - 5 D19 F - 1 S 7 D-4 S 8 E – 4 D 2 1 G-3 S 9 D 2 2 G-2F-5 F - 4 G – 2 S 1 0 D 2 3 D 2 4 G – 1 S11 G-5 S 1 2 D 2 6 J – 3 G-4 D27 J – 2 H – 4 D28 J – 1 S14 K – 2 A – 5 S16 K - 3 S17 N - 5 S19 M-5 \*: SOLDERING SIDE I C 2 B - 4 1 C 3 A – 5 IC4 A - 2 IC5 IC6 A - 3I C 7 I C 8 B - 3IC10 C - 4 IC11 IC12 IC13 IC14 IC15 IC16

K Y - 225; Switch

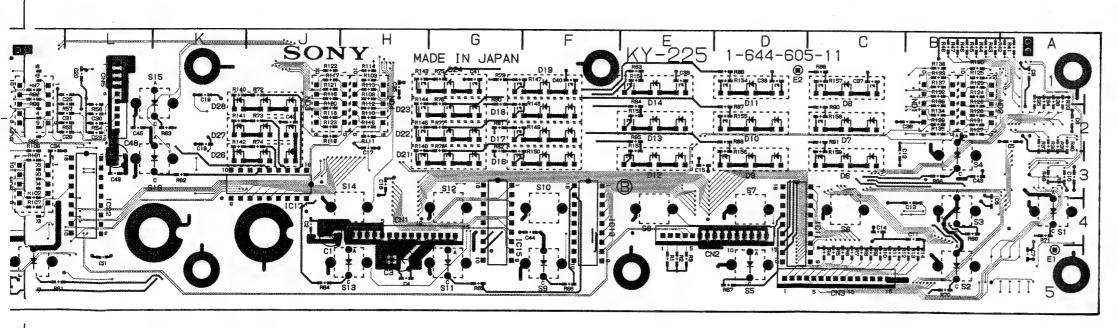




IC 17 IC 18 IC 19 IC 20 IC 21

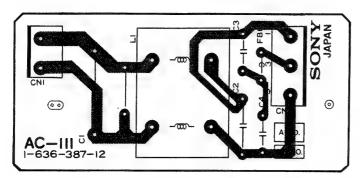


KY-225-A SIDE-1-644-605-11 DFS-500/500P

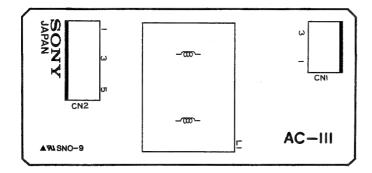


KY-225-B SIDE-1-644-605-11 DFS-500/500P

## AC-111; Line Filter (For Ek)

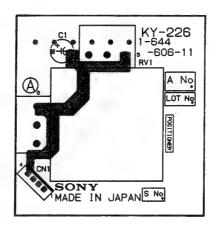


AC-111-A SIDE-1-836-387-12 DFS-500P

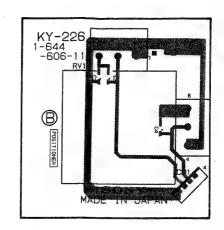


A C - 1 1 1 - B SIDE-1-636-387-12 DFS-500P

## KY-226; Positioner

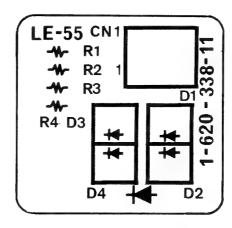


**KY-226-A** SIDE-1-644-606-11 DFS-500/500P

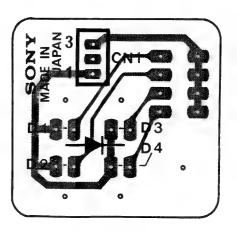


**KY-226-B** SIDE-1-644-606-11 DFS-500/500P

#### LE-55; Power Indicator



LE-55 -A SIDE-1-620-338-11 DFS-500/500P



LE-55 -B SIDE-1-620-338-11 DFS-500/500P





**VR** – 1-644-6 DFS-50C

**VR** – 1



VR -1-644-6 DFS-500

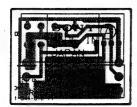
V R - 1



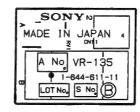
VR-1-644-6 DFS-500

VR-135; Location Control ; Title Control

;DSK(Down Stream Keyer)Control

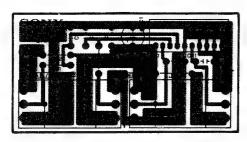


VR-135-A SIDE-1-644-610-11 DFS-500/500P

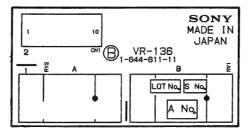


VR-135-B SIDE-1-644-610-11 DFS-500/500P

## VR-136; Edge/Trail/Shadow Control

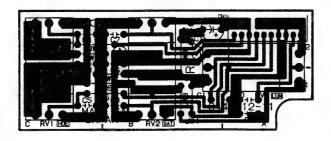


VR-136-A SIDE-1-644-611-11 DFS-500/500P



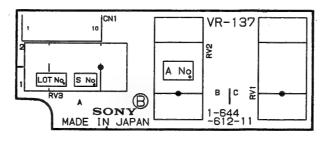
VR-136-B SIDE-1-644-611-11 DFS-500/500P

## VR-137; Mattes/BKGD Control



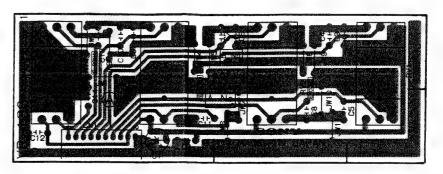
VR-137-A SIDE-1-644-612-11 DFS-500/500P

'E

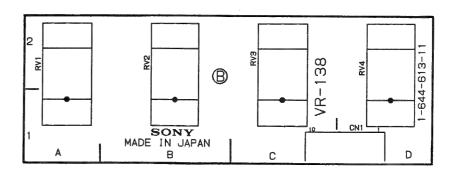


VR-137-B SIDE-1-644-612-11 DFS-500/500P

#### VR-138; Effect Control



VR-138-A SIDE-1-644-613-11 DFS-500/500P



VR-138-B SIDE-1-644-613-11 DFS-500/500P

# SECTION 7 SEMICONDUCTOR PIN ASSIGNMENTS

ここに記載されているIC, トランジスタ, ダイオードは, それぞれの機能を等価的に表したものです。したがって互換性を表すものではありません。(互換性のない型名が併記されている事もあります。) 部品の交換をする時は, SPARE PARTS の章を参照して、ださい。

Os, transistors and diodes of which functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

4F00PC. 7-2 LM1891M 7-22 SN74LS32PM 7-27 SN74LS374AN 7-29 14F00PC. 7-2 LM31PS 7-22 SN74LS374AM 7-29 14F00PC. 7-2 LM35PS 7-22 SN74LS374AM 7-29 14F30PC. 7-2 M32CD1-12F1 7-22 SN74LD0ANS 7-29 14F30PC. 7-35 14F30PC. 7-2 M512T1PF 7-22 SN74LD0ANS 7-29 14F30PC. 7-35 14F30PC. 7-2 M512T1PF 7-22 SN74LD0ANS 7-29 14F30PC. 7-35 14F30PC. 7-2 M8APD125BA 7-23 SN74LD0ANS 7-30 SN74LD0ANS 7-	, IC	PAGE	IC	PAGE	IC	PAGE	IC	PAGE
4F6BPC	4F00PC	7-2	LM1881M	7-22	SN74ALS32N	7-2		
7.4F39PC 7.2 LM358PS 7.22 SN74ALS74RNS 7.28 TC4586F 7.34 LM358PC 7.2 LM636IM 7.22 SN74ALS74AN 7.29 TC4566F 7.35 TC4566F 7.35 SN74HC03ANS 7.29 TC44C1914F 7.35 SN74HC03ANS 7.29 TC74HC1914F 7.35 SN74HC03ANS 7.29 TC74HC1914F 7.35 SN74HC03ANS 7.29 TC74HC1914F 7.35 SN74HC03ANS 7.30 TC74HC1914F 7.35 SN74HC03ANS 7.30 LD76283AP 7.35 SN74HC13ANS 7.30 LD7637AP 7.36 SN74HC13ANS 7.31 SN74HC13ANS 7.32 SN74					SN74ALS374A	AN7-29	TA7805S	7-34
TAFS99PC	, ,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				SN74ALS574E	3NS7-29	TC4584BF	7-34
M38LS31PC					SN74ALS74A	N7-29	TC4S66F	7-35
AM/26LS32PC 7-2 MS127IFP 7-23 SN74HC03NS 7-29 TD62083AP 7-35 MAX68S12PE 7-23 MAX68S12PE 7-23 SN74HC0ANS 7-30 TL022PS 7-36 MAX68S12PE 7-23 SN74HC10ANS 7-30 TL022PS 7-38 MAX68S12PE 7-23 SN74HC10ANS 7-30 TMS27C512-2UJL 7-38 MC74HC113F 7-24 SN74HC13ANS 7-30 UPC1037HA 7-38 MC74HC113F 7-24 SN74HC13ANS 7-30 UPC1037HA 7-38 MC74HC115F 7-24 SN74HC13ANS 7-30 UPC1037HA 7-38 MC74HC1614M 7-24 SN74HC13ANS 7-30 UPC1037HA 7-38 MC74HC1614M 7-24 SN74HC13ANS 7-30 UPC1037HA 7-38 MC74HC164M 7-24 SN74HC163ANS 7-30 UPC1037HA 7-38 MC74HC164M 7-3 NJM13700M 7-25 SN74HC20ANS 7-31 VAX1106M 7-3 NJM2338M 7-25 SN74HC24MANS 7-31 VAX1105M 7-4 NJM2338M 7-25 SN74HC24ANS 7-31 VAX115M 7-4 NJM2338M 7-25 SN74HC24ANS 7-31 VAX125M 7-5 NJM2245M 7-25 SN74HC24ANS 7-31 VAX117M 7-5 NJM2245M 7-25 SN74HC24ANS 7-31 VAX117M 7-5 NJM2245M 7-25 SN74HC24ANS 7-31 VAX105M 7-5 NJM320M 7-25 SN74HC32ANS 7-31 VAX105M 7-3 VAX10	141000101111111	-			SN74HC00AN	S7-29	TC74HC191AF	7-35
MAZ6LS32PC   7-2   M51271FP   7-23   SN74HC03NS   7-29   TD62083AP   7-35   TAS20CFS   7-36   TAS20CFS   7-37   TAS20C	M26LS31PC	7-2	M27C4001-12F1	7-22	SN74HC02AN	S7-29	TC74HC221AF	7-35
NAX891CPE			M51271FP	7-23	SN74HC03NS	7-29	TD62083AP	7-35
Name	ANIZOLOGEI O .				SN74HC04AN	S7-30	TL082CPS	7-36
X-1291   7-2	CY-1040	7-3			SN74HC10AN	S 7-30	TMS27C512-2	0JL7-35
No.				7-24	SN74HC113N	S7-24		
BX-1461					SN74HC132AI	NS7-30	UPC1037HA	7-36
X22017							UPC311G2	7-36
X22017	DA-1401	/-3						
N.   N.   N.   N.   N.   N.   N.   N.	1 V22017	7.2	10107411015414	***************************************				
CXA1106M         7-3         NJM13700M         7-25         SN74HC20ANS         7-31         XRA17809T         7-36           CXA1260C-Z         7-4         NJM22334M         7-25         SN74HC21ANS         7-31         TRANSISTOR           CXA145IM         7-7         NJM2234M         7-25         SN74HC244ANS         7-31         TRANSISTOR           IXD1216M         7-5         NJM2246M         7-25         SN74HC245ANS         7-31         ZSA1162G         7-37           CXD1217M         7-6         NJM2246M         7-25         SN74HC375ANS         7-31         ZSA1162G         7-37           CXD2105AQ         7-8         NJM360M         7-25         SN74HC375ANS         7-31         ZSA1462         7-37           XD8031Q         7-5         NJM78105A         7-25         SN74HC375ANS         7-32         ZSC1623         7-37           XD8033Q         7-7         NJM78105A         7-25         SN74HC374ANS         7-32         ZSC1623         7-37           XD80644         7-9         NJM7905FA         7-25         SN74HC374ANS         7-32         ZSK94         7-37           XD8262Q         7-11         NJM7905FA         7-25         SN74LS100N         7-27			NI74E977NI	7.24				
CXA12800-Z 7-4 NJM2233BM 7-25 SN74HC21ANS 7-31 TRANSISTOR  CXA1451M 7-7 NJM2234M 7-25 SN74HC24ANS 7-31 XD1175AM 7-4 NJM2233BM 7-25 SN74HC24ANS 7-31 XD1175AM 7-6 NJM2235M 7-25 SN74HC24ANS 7-31 ZSA1162G 7-37 CXD1217M 7-6 NJM2245M 7-25 SN74HC32ANS 7-31 ZSA1162G 7-37 CXD1217M 7-6 NJM2245M 7-25 SN74HC32ANS 7-31 ZSA1162G 7-37 CXD1217M 7-6 NJM245M 7-25 SN74HC32ANS 7-31 ZSA1462 7-37 XD8031Q 7-7 NJM3800M 7-25 SN74HC375ANS 7-32 ZSC3623 7-37 XD8031Q 7-7 NJM38109A 7-25 SN74HC374ANS 7-32 ZSC3623 7-37 XD8031Q 7-7 NJM38109A 7-25 SN74HC374ANS 7-32 ZSC3757 7-37 XD8054 7-9 NJM3905FA 7-25 SN74HC374ANS 7-32 ZSC3757 7-37 XD8054 7-9 NJM3905FA 7-25 SN74HC374ANS 7-32 ZSC3757 7-37 XD8054 7-9 NJM3905FA 7-25 SN74HC374ANS 7-32 ZSK304 7-37 CXD8262Q 7-11 NJM3905FA 7-25 SN74HC374ANS 7-32 ZSK304 7-37 CXD8263Q 7-12 SN74C34ANS 7-22 ZSK304 7-37 CXD8263Q 7-12 SN74C3ANS 7-27 SN74LS04N 7-2 SN74LS04N 7-3 SN74LS04N 7-3 SN74LS04N 7-2 SN74LS04N 7-3 SN74L	(						XRA17809T	7-36
CXA1451M         7-7         NJM2234M         7-25         SN74HC244ANS         7-31           XD1175AM         7-4         NJM2235M         7-25         SN74HC245ANS         7-31           XD1216M         7-5         NJM2245M         7-25         SN74HC32ANS         7-31           CXD1217M         7-6         NJM2246M         7-25         SN74HC375ANS         7-31         2SA1462         7-37           CXD2105AQ         7-8         NJM360M         7-25         SN74HC375ANS         7-32         2SA952         7-37           XD8031Q         7-5         NJM78L09A         7-25         SN74HC574ANS         7-32         2SC1623         7-37           XD8064         7-9         NJM7906FA         7-25         SN74HC574ANS         7-32         2SK508         7-37           CXD826QQ         7-11         NJM7909FA         7-25         SN74LS0NA         7-32         2SK94         7-37           CXD826QQ         7-11         NJM7909FA         7-25         SN74LS0NA         7-22         2SK90         7-37           CXD826QQ         7-11         NJM7909FA         7-25         SN74LS0NA         7-27         DIODE           XD826QQ         7-11         NJM7909FA							711.0111.0001	
XD1175AM							TRANSISTOR	
XD1216M							TITAL COLOR	
CXD1217M							25A1162G	7-37
CXD2105AQ 7-8 NJM360M 7-25 SN74HC4075ANS 7-32 2SA952 7-37     XD8031Q 7-5 NJM78L05A 7-25 SN74HC573ANS 7-32 2SC1623 7-37     XD8033Q 7-7 NJM78L05A 7-25 SN74HC573ANS 7-32 2SC2757 7-37     XD803C 7-7 NJM79L05A 7-25 SN74HC574ANS 7-32 2SC2757 7-37     XD8054 7-9 NJM7905FA 7-25 SN74HC574ANS 7-32 2SC568 7-37     CXD8070K 7-10 NJM7905FA 7-25 SN74HC74ANS 7-32 2SK94 7-37     CXD826QQ 7-11 NJM79L09A 7-25 SN74HC574ANS 7-32 2SK94 7-37     XD8263Q 7-12								
XDB031Q								
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XD8054								
CXDB070K         7-10         NJM7909FA         7-25         SN74HCT574ANS         7-32         2SK94         7-37           CXD8262Q         7-11         NJM79L09A         7-25         SN74LS00N         7-2           ;XD8263Q         7-12         SN74LS06N         7-2           ;XD8264Q         7-9         PAL16L8BCN         7-26         SN74LS10N         7-27           ;CXD8266Q         7-13         PST523C         7-26         SN74LS10N         7-27         1S2836         7-38           ;CXD8266Q         7-14         SN74LS138N         7-27         1S2836         7-38           ;CXD8267Q         7-15         SC7500F         7-26         SN74LS138N         7-27         1SS236         7-38           ;XXB267Q         7-15         SC7500F         7-26         SN74LS138N         7-27         1SS226         7-38           ;XXB26QQ         7-10         SM5828P         7-26         SN74LS14N         7-32         FC54M         7-38           ;XXK5464AP-35         7-16         SN74ALS00AN         7-2         SN74LS14N         7-28         LD-701MG         7-38           ;XXK5644AP-35         7-17         SN74ALS08N         7-2         SN74LS24N         7-28								
CXD8262Q         7-11         NJM79L09A         7-25         SN74LS00N         7-2           XXD8263Q         7-12         SN74LS04N         7-27         DIODE           XXD8264Q         7-9         PAL16L8BCN         7-26         SN74LS08N         7-2           CXD8266Q         7-13         PST523C         7-26         SN74LS10N         7-27         152836         7-38           CXD8266Q         7-14         SC7500F         7-26         SN74LS138N         7-27         15S119         7-38           CXD826FQ         7-15         SC7500F         7-26         SN74LS138N         7-27         15S226         7-38           -XD8276Q         7-15         SI-3522V         7-26         SN74LS138N         7-27         15S226         7-38           CXK1206AM         7-10         SM5828P         7-26         SN74LS14NS         7-32         FC54M         7-38           CXK54266P-35         7-16         SN74ALS04N         7-27         SN74LS17AN         7-28         LD-701MG         7-38           XK5644AP-35         7-17         SN74ALS08N         7-27         SN74LS24N         7-28         LD-701MG         7-38           XK56825AP-25         7-16         SN74ALS138N								
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XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			NJM79L09A	7-25			DIODE	
CXD8265Q         7-13         PST523C         7-26         SN74LS10N         7-27         1S2836         7-38           CXD8266Q         7-14         SC7500F         7-26         SN74LS138N         7-27         1SS119         7-38           CXD826FQ         7-15         SI-3522V         7-26         SN74LS139AN         7-27         1SS226         7-38           CXK120GQ         7-10         SM5828P         7-26         SN74LS164N         7-32         FC54M         7-38           CXK1206AM         7-16         SN74ALS00AN         7-2         SN74LS175N         7-28         LD-701MG         7-38           CXK54256P-35         7-16         SN74ALS04BN         7-27         SN74LS175N         7-28         LD-701MG         7-38           CXK58426P-35         7-16         SN74ALS04BN         7-2         SN74LS194N         7-33         LD-010MW         7-38           CXK5814P-35         7-17         SN74ALS10AN         7-2         SN74LS194N         7-33         LD-010MW         7-38           CXK5814P-35         7-17         SN74ALS11AN         7-27         SN74LS21N         7-28         MA152WK         7-38           CXK5812FAM-36         7-16         SN74ALS138N         7-27							DIODE	
CXD8266Q 7-14 SN74LS138N 7-27 SN74LS138N 7-27 SN74LS14NS 7-38 SN74LS14NS 7-38 SN74LS14NS 7-38 SN74LS14NS 7-32 FC54M 7-38 CXK1206AM 7-16 SN74ALS00AN 7-2 SN74LS16AN 7-28 CXK1206AM 7-16 SN74ALS00AN 7-2 SN74LS176N 7-28 LD-701MG 7-38 SN74LS15N 7-27 SN74LS176N 7-38 LD-010MW 7-38 SN74LS14NS 7-27 SN74LS194AN 7-33 LD-010MW 7-38 SN74LS14NS 7-27 SN74LS10AN 7-33 LD-010MW 7-38 CXK5864AP-35 7-17 SN74ALS10AN 7-27 SN74LS20N 7-33 CXK5864AP-35 7-17 SN74ALS10AN 7-27 SN74LS21N 7-28 MA152WK 7-38 CXK5865P-25 7-16 SN74ALS138N 7-27 SN74LS21N 7-28 MA152WK 7-38 CXK5865P-25 7-18 SN74ALS138N 7-27 SN74LS21NS 7-33 SN74LS221NS 7-33 SXK5864BSP-70L 7-18 SN74ALS15N 7-27 SN74LS24NN 7-29 RD??ESB? 7-38 SXC070108P-8 7-19 SN74ALS15N 7-28 SN74LS24NN 7-29 RD??ESB? 7-38 CXC07016P-10 7-20 SN74ALS15NN 7-28 SN74LS24NN 7-33 RD??MB 7-38 CXC071061P 7-21 SN74ALS161BN 7-28 SN74LS28NNS 7-34 CXC071061P 7-21 SN74ALS161BN 7-28 SN74LS28NNS 7-34 TLY123 7-38 SN74LS175N 7-28 SN74LS373N 7-34 TLY123 7-38 SN74LS175N 7-28 SN74LS21AN 7-29 SN74LS375N 7-34 SN74LS21AN 7-28 SN74LS375N 7-34 SN74LS21AN 7-29 SN74LS21AN 7-28 SN74LS375N 7-34 SN74LS21AN 7-28 SN74LS375N 7-34 SN74LS21AN 7-28 SN74LS375N 7-34 SN74LS21AN 7-29 SN74LS21AN 7-29 SN74LS375N 7-34 SN74LS21AN 7-29 SN74LS21AN 7-28 SN74LS375N 7-34 SN74LS21AN 7-29 SN74LS21AN 7-29 SN74LS375N 7-34 SN74LS375N 7-34 SN74LS21AN 7-29 SN74LS21AN 7-29 SN74LS375N 7-34 SN74LS21AN 7-29 SN74LS375N 7-34 SN74LS244BN 7-29 SN74LS375N 7-34 SN74LS244BN 7							400000	7 20
7XD82670         7-15         SC7S00F         7-26         SN74LS139AN         7-27         1SS226         7-38           -;XD8276Q         7-15         SI-3522V         7-26         SN74LS14NS         7-32         7-32         FC54M         7-38           ;XK1203Q         7-10         SM5828P         7-26         SN74LS164N         7-32         FC54M         7-38           ;CXK1206AM         7-16         SN74ALS00AN         7-2         SN74LS175N         7-28         LD-701MG         7-38           ;CXK54266P-35         7-16         SN74ALS08N         7-27         SN74LS175N         7-28         LD-701MG         7-38           ;XK5846AP-35         7-17         SN74ALS08N         7-2         SN74LS194AN         7-33         LD-010MW         7-38           ;XK5814P-35         7-17         SN74ALS10AN         7-27         SN74LS20N         7-33         LD-010MW         7-38           ;XK5814P-35         7-17         SN74ALS138N         7-27         SN74LS21N         7-28         MA152WK         7-38           ;XK58258AP-25         7-16         SN74ALS138N         7-27         SN74LS221N         7-28         MA152WK         7-38           ;XK5864BSP-70L         7-18         SN74A			PST523C	7-26				
XK1203Q							188226	/-38
CXK1206AM	-:XD8276Q	7-15						7.00
CXK54256P-35 7-16 SN74ALS04BN 7-27 SN74LS175N 7-28 LD-701MG 7-38     XK5464AP-35 7-17 SN74ALS08N 7-2 SN74LS194AN 7-33 LD-010MW 7-38     XK5814P-35 7-17 SN74ALS10AN 7-27 SN74LS20N 7-33     XK58257AM-12LL 7-17 SN74ALS11AN 7-27 SN74LS21N 7-28 MA152WK 7-38     CXK58258AP-25 7-16 SN74ALS138N 7-27 SN74LS21NS 7-33     CXK5863P-25 7-18 SN74ALS138N 7-27 SN74LS24N 7-29 RD??ESB? 7-38     XK5664BSP-70L 7-18 SN74ALS151N 7-27 SN74LS24N 7-29 RD??ESB? 7-38     XXO70108P-8 7-19 SN74ALS153N 7-28 SN74LS247NS 7-33 RD??M-B? 7-38     CXC70116P-10 7-20 SN74ALS157AN 7-28 SN74LS24NS 7-34     CXC71051P 7-21 SN74ALS161BN 7-28 SN74LS28NS 7-34     CXC71054P 7-21 SN74ALS174N 7-28 SN74LS373N 7-34     XN74LS217SN 7-28 SN74LS373N 7-34     SN74ALS17SN 7-28 SN74LS37SN 7-34     SN74ALS17SN 7-28 SN74LS37SN 7-34     SN74ALS17SN 7-28 SN74LS37SN 7-34     SN74ALS17SN 7-28 SN74LS37SN 7-34     SN74ALS14N 7-29 SN74LS37SN 7-34     SN74ALS24ABN 7-29 SN74LS37SN 7-34     SN74ALS24ABN 7-29 SN74LS37SN 7-34     SN74LS26ABN 7-38 SN74LS37SN 7-34     SN74ALS21AN 7-28 SN74LS37SN 7-34     SN74ALS24ABN 7-29 SN74LS37SN 7-34     SN74LS26ABN 7-39 SN74LS37SN 7-34	CXK1203Q	7-10			# · · · · · · · · · · · · · · · · · · ·		FC54M	/-38
XK5464AP-35   7-17	CXK1206AM	7-16						
XK5814P-35	CXK54256P-35	·7-16	SN74ALS04BN	7-27				
CXK58257AM-12LL 7-17 SN74ALS11AN 7-27 SN74LS21N 7-28 MA152WK 7-38 CXK58258AP-25 7-16 SN74ALS138N 7-27 SN74LS21NS 7-33 CXK5863P-25 7-18 SN74ALS139NS 7-27 SN74LS244N 7-29 RD??ESB7 7-38 CXK5864BSP-70L 7-18 SN74ALS151N 7-27 SN74LS245N 7-33 RD??M-B7 7-38 CXC70108P-8 7-19 SN74ALS153N 7-28 SN74LS247NS 7-33 RD??MB 7-38 CXC70116P-10 7-20 SN74ALS157AN 7-28 SN74LS283NS 7-34 CXC71051P 7-21 SN74ALS161BN 7-28 SN74LS283NS 7-24 CXC71054P 7-21 SN74ALS174N 7-28 SN74LS373N 7-24 TLR214 7-38 CXC71054P 7-21 SN74ALS175N 7-28 SN74LS373N 7-34 SN74ALS175N 7-28 SN74LS375N 7-34 SN74ALS175N 7-28 SN74LS375N 7-34 SN74ALS124AN 7-29 SN74LS375N 7-34 SN74ALS244BN 7-29 SN74LS684N 7-34	XK5464AP-35	57-17	SN74ALS08N	7-2			LD-010MW	7-38
CXK58258AP-25 7-16 SN74ALS138N 7-27 SN74LS221NS 7-33 CXK5863P-25 7-18 SN74ALS139NS 7-27 SN74LS244N 7-29 RD??ESB7 7-38 CXK5864BSP-70L 7-18 SN74ALS151N 7-27 SN74LS245N 7-33 RD??M-B7 7-38 CXQ70108P-8 7-19 SN74ALS153N 7-28 SN74LS247NS 7-33 RD??MB 7-38 CXQ70116P-10 7-20 SN74ALS157AN 7-28 SN74LS28NS 7-34 CXQ71051P 7-21 SN74ALS161BN 7-28 SN74LS28NS 7-34 CXQ71054P 7-21 SN74ALS161BN 7-28 SN74LS373N 7-34 TLY123 7-38 SN74ALS175N 7-28 SN74LS374N 7-29 CXQ71054P 7-22 SN74ALS175N 7-28 SN74LS375N 7-34 SN74ALS175N 7-28 SN74LS375N 7-34 SN74ALS124AN 7-29 SN74LS375N 7-34 SN74ALS244BN 7-29 SN74LS684N 7-34	CXK5814P-35	7-17	SN74ALS10AN	7- <b>27</b>				
CXK5863P-25         7-18         SN74ALS139NS         7-27         SN74LS244N         7-29         RD??ESB?         7-38           CXK5864BSP-70L         7-18         SN74ALS151N         7-27         SN74LS245N         7-33         RD??M-B?         7-38           CXQ70108P-8         7-19         SN74ALS153N         7-28         SN74LS247NS         7-33         RD??MB         7-38           CXQ70116P-10         7-20         SN74ALS157AN         7-28         SN74LS283NS         7-34           CXQ71051P         7-21         SN74ALS161BN         7-28         SN74LS32N         7-2         TLR214         7-38           CXQ71054P         7-21         SN74ALS174N         7-28         SN74LS373N         7-34         TLY123         7-38           SN74ALS175N         7-28         SN74LS374N         7-29         TLY123         7-38           HD14053BFP         7-22         SN74ALS21AN         7-28         SN74LS375N         7-34           SN74ALS244BN         7-29         SN74LS684N         7-34	CXK58257AM-	12LL7-17	SN74ALS11AN	7-27			MA152WK	7-38
CXK5863P-25         7-18         SN74ALS139NS         7-27         SN74LS244N         7-29         RD??ESB?         7-38           CXK5864BSP-70L         7-18         SN74ALS151N         7-27         SN74LS245N         7-33         RD??M-B?         7-38           CXQ70108P-8         7-19         SN74ALS153N         7-28         SN74LS247NS         7-33         RD??MB         7-38           CXQ70116P-10         7-20         SN74ALS157AN         7-28         SN74LS283NS         7-34           CXQ71051P         7-21         SN74ALS161BN         7-28         SN74LS32N         7-2         TLR214         7-38           CXQ71054P         7-21         SN74ALS174N         7-28         SN74LS373N         7-34         TLY123         7-38           HD14053BFP         7-22         SN74ALS21AN         7-28         SN74LS375N         7-34           SN74ALS244BN         7-29         SN74LS684N         7-34	CXK58258AP-2	25 7-16	SN74ALS138N	7-27	SN74LS221N	S7-33		
XXQ70108P-8			SN74ALS139NS	3 7-27	SN74LS244N	7-29		
CXQ70116P-10     .7-20     SN74ALS157AN     .7-28     SN74LS283NS     .7-34       CXQ71051P     .7-21     SN74ALS161BN     .7-28     SN74LS32N     .7-2     TLR214	CXK5864BSP-1	70L7-18	SN74ALS151N	7-27	SN74LS245N	7-33		
CXQ70116P-10       .7-20       SN74ALS157AN       .7-28       SN74LS283NS       .7-34         CXQ71051P       .7-21       SN74ALS161BN       .7-28       SN74LS32N       .7-2       TLR214	CXQ70108P-8	7-19·	SN74ALS153N	7-28	SN74LS247N	S7-33	RD??MB	7-38
CXQ7 1051P			SN74ALS157AN	V7-28	SN74LS283N	S7-34		
CXQ71054P     7-21     SN74ALS174N     7-28     SN74LS373N     7-34     TLY123     7-38       SN74ALS175N     7-28     SN74LS374N     7-29       HD14053BFP     7-22     SN74ALS21AN     7-28     SN74LS375N     7-34       SN74ALS244BN     7-29     SN74LS684N     7-34			SN74ALS161BN	17-28	SN74LS32N	7-2		
SN74ALS175N					SN74LS373N	7-34	TLY123	7-38
.HD14053BFP7-22 SN74ALS21AN7-28 SN74LS375N7-34 SN74LS244BN7-29 SN74LS684N7-34					SN74LS374N	7-29		
SN74ALS244BN7-29 SN74LS684N7-34	HD14053BFP	7-22						
***************************************		,						
	IB-38	7-22						

等価回路はICメーカーのData Bookに従いました。

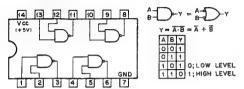
The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.



74F00PC (NS) SN74ALS00AN (TI) SN74LS00N (TI)

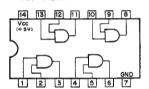
TTL 2-INPUT POSITIVE-NAND GATE

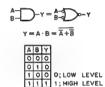
- TOP VIEW -



74F08PC (NS) SN74ALS08N (TI) SN74LS08N (TI)

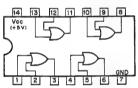
TTL 2-INPUT POSITIVE-AND GATE - TOP VIEW -





74F32PC (NS) SN74ALS32N (Ti) SN74LS32N (TI)

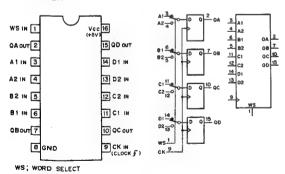
TTL 2-INPUT POSITIVE-OR GATE - TOP VIEW -





74F399PC (NS)

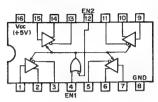
TTL QUAD 2-INPUT MULTIPLEXERS WITH STORAGE - TOP VIEW -



INPUTS		OUTPUTS			
ws	СК	QA	QB	oc	QD
0	_5	A1	91	C1	D1
1	5	A2	82	C2	02
X	0	QAO	QBO	QÇO	ODO

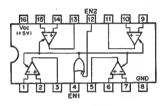
1; HIGH LEVEL O; LOW LEVEL X; DON T CARE

AM26LS31PC (ADVANCED MICRO DEVICES) HIGH SPEED DIFFERENTIAL LINE DRIVER - TOP VIEW -



	FUNCTION TABLE				
EN2	EN1	OUTPUT			
0	0	ENABLE			
0	1	ENABLE			
1	0	HI-Z			
1	1	ENABLE			
O; LOW LEVEL					
HI-Z; HIGH IMPEDANCE					

AM26LS32PC (ADVANCED MICRO DEVICES) HIGH SPEED DIFFERENTIAL LINE RECEIVER - TOP VIEW -

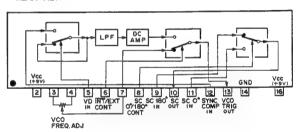


FUNC	TION	TABLE			
EN2	ENI	OUTPUT			
0	0	ENABLE			
0	1	ENABLE			
1	0	HI-Z			
1	1	ENABLE			
	D; LOW LEVEL				
1; HIGH LEVEL					
HI-Z; HIGH IMPEDANCE					

	SENSE	INPUT VOLT
LS32	±200mV	± 7V
LS33	±500mV	±15V

BX1291 (SONY)

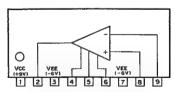
APC AMPLIFIER AND SC 0/180° SELECTOR - REAR VIEW -



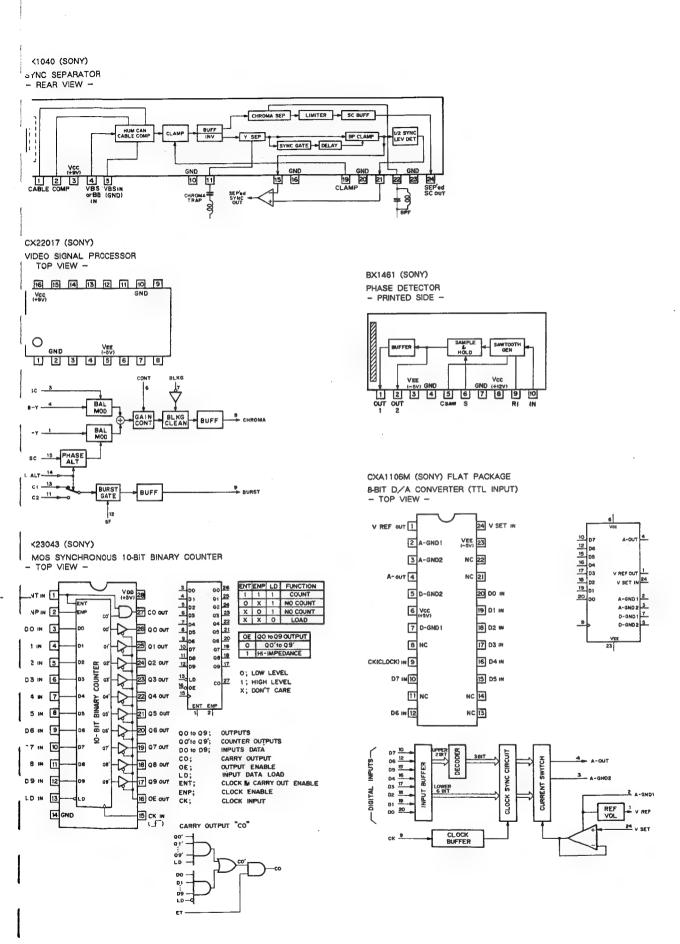
BX1356 (SONY)

VIDEO OUTPUT AMPLIFIER

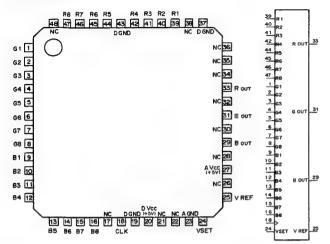
- PRINTED SIDE -



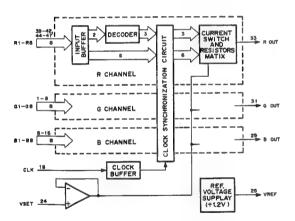




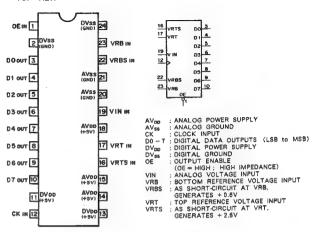
CXA1260Q-Z (SONY) FLAT PACKAGE 8-BIT 35MHz 3-CHANNEL D/A CONVERTER - TOP VIEW -



B1-B8 ; B CHANNEL DIGITAL INPUTS (LSB TO MSB)
B OUT ; B CHANNEL ANALOG OUTPUT
CLK ; D/A CONVERSION CLOCK
G1-G8 ; G CHANNEL DIGITAL INPUTS (LSB TO MSB)
G OUT ; G CHANNEL ANALOG OUTPUT
R1-R8 ; R CHANNEL DIGITAL INPUTS (LSB TO MSB)
R OUT ; R CHANNEL DIGITAL INPUTS (LSB TO MSB)
VSEF ; RFFERENCE VOLTAGE OUTPUT, +1.2V TYP.
VSET ; BIAS INPUT (VSET = +0.87V ; D/A OUT = 1VP-P)

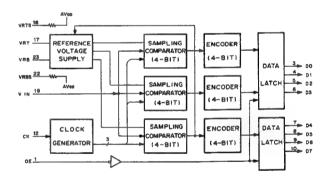


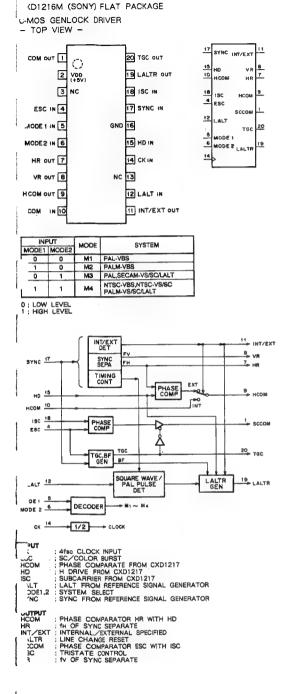
CXD1175AM (SONY) FLAT PACKAGE
C-MOS 8-BIT 20MSPS VIDEO A/D CONVERTER
- TOP VIEW -



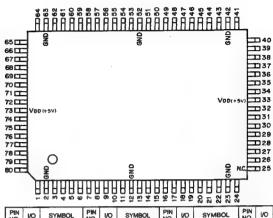
07770	INPUT SIGNAL	DATA OUTPUTS										
STEP	VOLTAGE	D7	D6	D5	D4	D3	D2	D1	DO			
0	0V (VRT)	1	1	1	1	1	1	1	1			
1	0.01V	1	1	1	1	1	1	1_	0			
			-	1		1	-	1				
;	<b>:</b>	1 :	:	:	1	:	;	1	_ :			
127	1.34V	1	0	0	0	0	0	0	0			
128	1.35V	0	. 1	1	1	1	1	1	1			
:			1		1	1	:					
:	1	1 :	1	1	:	1	1	:	]			
255	2.7V (VRB)	0	0	0	0	0	0	0	0			

0: LOW LEVEL 1: HIGH LEVEL

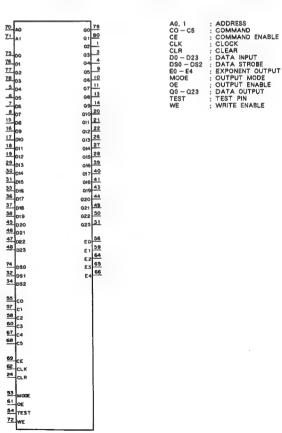




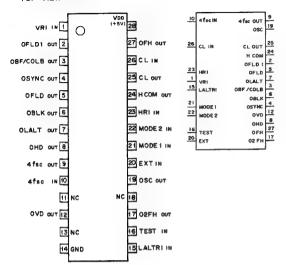
CXD8031Q (SONY) FLAT PACKAGE C-MOS GATE ARRAY - TOP VIEW -



PIN NO.	NO	SYMBOL	PIN NO.	NO	SYMBOL	PIN NO.	VO.	SYMBOL	PIN NO.	1/0	SYMBOL
1	0	02	21	0	Q11	41	0	Q18	61	1	OE
2	-	GND	22	0	Q12	42	-	GND	62		CLK
3	0	Q3	23	-	GND	43 -	0	Q19	63	-	GND
4	0	Q4	24	1	CLR	44	0	Q20	64	0	E2
5		D4	25	-	N.C.	45	T	D20	65	0	E3
6	-	D5	26	0	Q13	46	1	D21	66	0	E4
7	$\Box$	D6	27	0	Q14	47	-	D22	67	1	C4
8	T	D7	28	0	Q15	48	1	D23	68	1	C5
9	0	Q5	29	1	D13	49	0	Q21	89		CE
10	0	Q6	30	1	D14	50	0	Q22	70		A0
11	0	Q7	31	1	D15	51	0	Q23	71	1	A1
12	-	GND	32	1	DS1	52	-	GND	72	1	WE
13	0	Q8	33	-	Voc (+5V)	53	1	MODE	73	- 1	Vap (+5V)
14	0	Q9	34	1	DS2	54	1	TEST	74	4	DS0
15	1	D8	35	1	D16	55	1	CO	75	1	D0
16	3	D9	36	1	D17	56	0	EO	76	1	D1
17	T	D10	37	-	D18	57	1	C1	77	1	D2
18	1	D11	38	T	D19	58	-	C2	78	1	D3
19		D12	39	0	Q16	59	0	E1	79	0	Q0
20	ō	Q10	40	o	Q17	60	1	C3	80	0	Q1

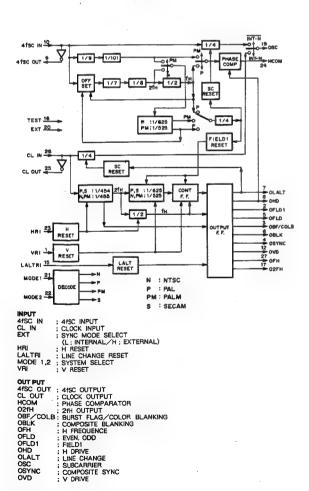


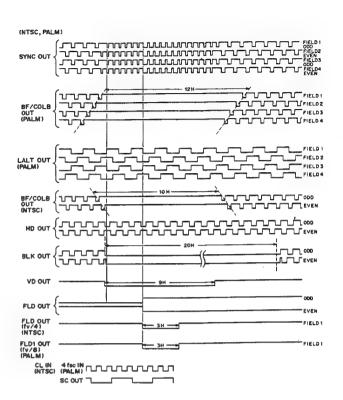
### CXD1217M (SONY) FLAT PACKAGE C-MOS SYNC GENERATOR - TOP VIEW -

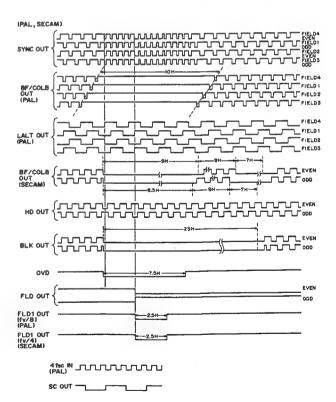


SYSTEM	4fsc	CLOCK
NTSC	910fн	910fH
PAL	1135fH+2fv	908fH
PALM	909fu	910fH
SECAM	_	908fH

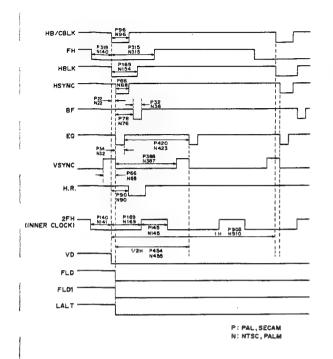
	UT	SYSTEM
MODE1	MODE2	3101LM
0	0	NTSC
0	1	SECAM
1	0	PALM
1	1	PAL
0 ; LOW 1 ; HIGH	LEVEL	



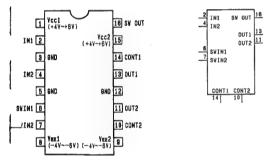






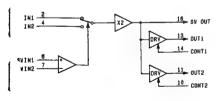


XA1451M (SONY)
WIDEBAND VIDEO SWITCH
- TOP VIEW -

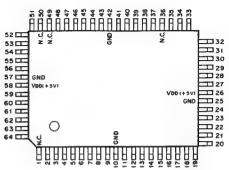


NPUT
:ONT1, 2; POWER SAVE CONTROL PIN OF DRV.1 AND DRV.2
1T1, 2; 1/2-CHANNEL INPUT PIN
WIN1, 2; IN1/IN2 PINS SWITCH CONTROL PIN

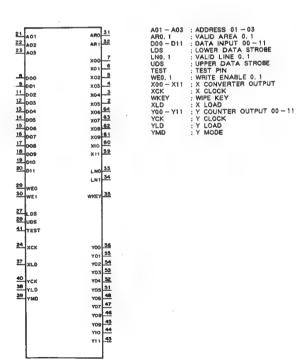
OUTPUT
OUT1, 2 ; OUTPUT PIN OF DRV.1/2
SWOUT ; OUTPUTS IN1' PIN OR IN2 PIN WHICH HAS BEEN
SELECTED BY SWITCH.



CXD8033Q (SONY) FLAT PACKAGE C-MOS GATE ARRAY - TOP VIEW -



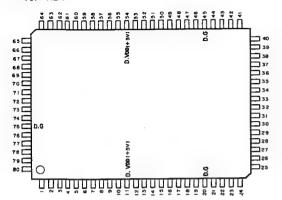
PIN NO.	NO	SYMBOL.	PIN NO.			PIN NO.	1/0	SYMBOL
1	-	N.C.	23	ı	A03	45	0	Y09
2	0	X05	24	1	XCK	46	0	Y08
3	0	X04	25	-	GND	47	0	Y07
4	0	X03	26	-	Voo(+5V)	48	0	Y06
5	0	X02	27	1	LDS	49		N.C.
8	0	X01	28		UDS	50	-	N.C.
7	0	X00	29		WE0	51	0	Y05
8	1	D00	30	-	WE1	52	0	Y04
9	П	D01	31	0	AR0	53	0	Y03
10	-	GND	32	0	ARS	54	0	Y02
11	1	DQ2	33	0	LNO	55	0	Y01
12		D03	34	0	LN1	56	0	Y00
13		D04	35	0	WKEY	57	_	GND
14		D05	36	-	N.C.	58	-	Vpp(+5V)
15	1	D06	37	1	XLD	59	0	X11
16	T	D07	36	-	YLD	60	0	X10
17	T	D08	39	1	YMD	61	0	X09
18	1	D09	40		YCK	62	0	X08
19	-	D10	41	F	TEST	63	0	X07
20	T	D11	42	-	GND	64	0	X06
21	T	A01	43	0	Y11	1		
22	1	A02	44	0	Y10			



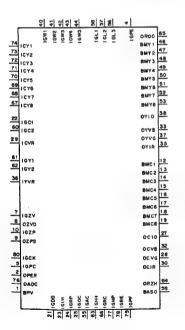
CXD2105AQ (SONY) FLAT PACKAGE

C-MOS DIGITAL COMB FILTER FOR VTR'S

- TOP VIEW -



PIN No.	1/0	SIGNAL	PiN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1		BPV	21		(GDQ	41	1	IGW2	61		IGY1
2	0	OPER	22	T	IGC1	42	1	IGW3	62		IGY2
3	-	A.VDD P	23	1	IGIH	43	1	IGW4	63		IGH1
4		IGPE	24	1	IGRP	44		IGW5	64	0	ORZH
5	1	IGPC	25	1	IGOC	45	-	D.G	65	0	OR00
6	-	A.G P	26	-	A.VDD C	46	1/0	BMY1	66		IGRC
7	1	IGZV'	27	0	OCIO	47	1/0	BMY2	67	1	IYC8
8	0	OZVD	28	0	OCVG	48	1/0	BMY3	68		IYC7
9	0	OZPS	29	-	ICVR	49	1/0	BMY4	69	1	IYC6
10	1	IGZP	30	0	OCIR	50	1/0	BMY5	70		IYC5
11	-	D.Voo	31	-	A.G C	51	1/0	BMY6	71	1	IYC4
12	1/0	BMC1	32	0	OCVB	52	1/0	BMY7	72	1	IYC3
13	1/0	BMC2	33	0	OYVB	53	1/0	BMY8	73	1	IYC2
14	1/0	BMC3	34	-	A.G Y	54	-	D.VDD	74		IYC1
15	1/0	BMC4	35	0	OYIR	55		IGAC	75	-	D.G
16	1/0	BMC5	36	-	IYVR	56		IGL3	76	0	OADC
17	1/0	BMC6 ·	37	0	OYVG	57	1	IGL2	77		IGNP
18	1/0	BMC7	38	0	OYIO	58		IGL1	78		IGBE
19	1/0	BMC8	39	-	A.VDD Y	59	1/0	BASO	79	1	IGPF
20	-	D.G	40	1	IGW1	60	1	IGC2	80		IGCK



```
INPUT

BPY

EXT / INT CLOCK SELECT

ICVR

ESTABLISHES MAXIMUM AMPLITUDE VALUE FOR OCIO

(PIN 27)

IGAC

V CORRELATION CIRCUIT ON / OFF

IGSE

SINGLE WAVE DETECTION ON / OFF

IGC2

V CORRELATION CIRCUIT SELECT

ICVC SEPARATION MODE)

IGC3

ICV CORRELATION CIRCUIT SELECT

(Y/C SEPARATION MODE)

IGC4

IGC5

IGC6

IGC7

IGC7

IGC7

IGC7

IGC8

IGC7

IGC8

IGC8

IGC8

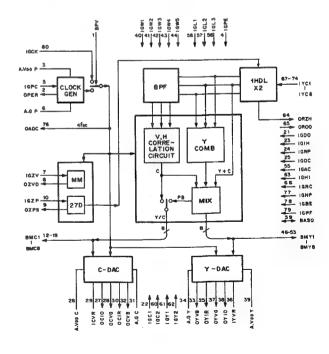
IGC8

IGC8

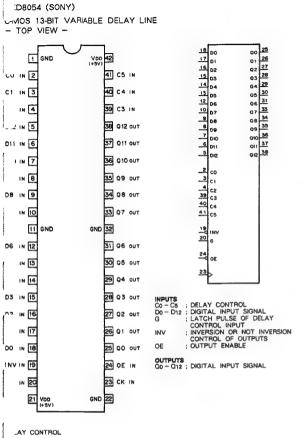
IGC9

IGC9
```

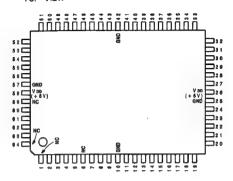
OTHER
AG C : ANALOG GND FOR CHROMA D/A
AG C : ANALOG GND FOR VCO
AG W : ANALOG GND FOR Y D/A
AVOD P : ANALOG GND FOR Y D/A
AVOD P : ANALOG POWER SUPPLY FOR CHROMA D/A
AVOD P : ANALOG POWER SUPPLY FOR Y D/A
DG : DIGITAL GND
D.V00 : POWER SUPPLY FOR Y D/A
D.V00 : POWER SUPPLY FOR DIGITAL



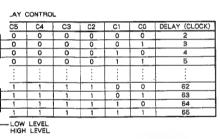


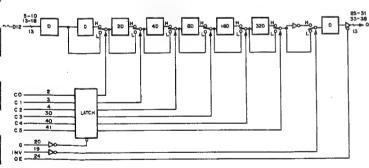


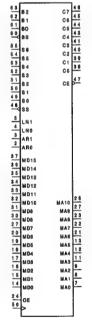
CXD8264Q (SONY) C-MOS CONTROLLED TO ADDRESS ARITHMETIC – TOP VIEW –



											( V DD= +5\
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PłN No.	1/0	SIGNAL
1	-	NC	17	- 1	MD\$	3.8	1	MD11	4.9	1	8.0
2	1	ARG	1.8	1	MD4	34	4	MD12	5.0		81
,		ART	1.9	Ι.	MOS	3.5	1	MD13	5 1	l l	8.2
4	1	LNO	2.0	1	MD6	36	1	MD14	5.2		8.3
8	1	LN1	21	0	MAG	37	1	MD15	5.8	1	84
8	-	NC	22	0	MA7	38	0	CO	8.4	- j	8.6
7	0	MAG	23	0	MAS	39	0	C1	5.6	1	8.6
1	0	MA1	2 4	Т	0E	40	0	CS	5 8	1	CK
1	0	BAN	2.6	-	GND	41	0	CS	5 7	-	GND
1.0	-	GND	26	-	Veo	42	-	GND	5.8	-	V pp
11	0	MAS	27	0	MAS	43	0	G4	5 9	- 1	NC
12	0	MA4	2.8	0	MA10	44	0	C6	8.0	1	B 6
13	0	MAS	28	1	MD7	4.5	0	06	6.1	1	BO
1.4	11	MDO	3.0	Ti.	MDe	4.0	0	C7	8.2	1	B 1
1.5	1	MD1	31	1	MOs	47	0	ÇE	8.3	1	B 2
1.6		MD2	3.2	T	MD10	48	1	88	6.4	-	NC







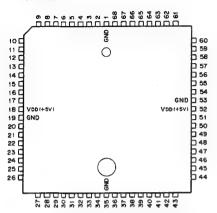
ADDRESS BANK REGISTER DATA PORT ADDRESS BANK STROBE CLOCK

MEMORY DATA PORT

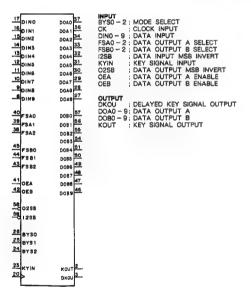
: MEMORY DATA FORT : OUTPUT ENABLE FOR MEMORY ADDRESS : START ADDRESS REGISTER : WRITE STROBE FOR START ADDRESS REGISTER 80-88 88

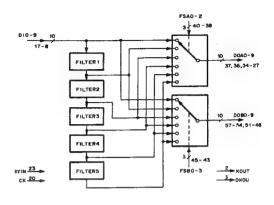
: CONTROL PORT FOR ADDRESS ARITHMETIC IC C0-C7 CHIP ENABLE MEMORY ADDRESS PORT

CXD8070K (SONY)
C-MOS DIGITAL VIDEO LPF
- TOP VIEW -

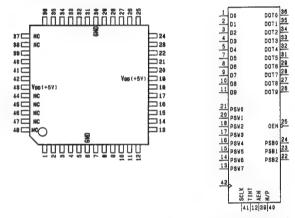


PIN No.	1/0	SIGNAL									
1	-	GND	18		VDD	35	-	GND	52	-	VDD
2	0	KOUT	19	-	GND	36	0	DOA1	53	-	GND
3	0	DKOU	20		CK	37	0	DOAO	54	0	DOB3
4	-	NC	21	-	NC	38		FSA2	55	0	DOB2
5	-	NC	22	-	NC	39		FSA1	56	0	DOB1
6	-	NC	23	ı	KYIN	40		FSAO	57	0	DOB0
7	-	NC	24	1	BYS2	41	111	OEA	58		O2SB
8	1	DING	25	- 1	BYS1	42	- 1	OEB	59		1258
9		DIN8	26	1	BYS0	43		FSB2	60	-	NC
10	-	DIN7	27	0	DOA9	44		FSB1	61	-	NC
11	1	DIN6	28	0	DOA8	45		FSBC	62	-	NC
12		DIN5	29	0	DOA7	46	0	DOB9	63	-	NC
13	T	DIN4	30	0	DOA6	47	0	DO88	64	-	NC
14	1	DINS	31	0	DOA5	48	0	DOB7	65	-	NC
15		DIN2	32	0	DQA4	49	0	DOB6	66	-	NC
16	1	DIN1	33	0	DOA3	50	0	DOB5	67	-	NC
17	1	DINO	34	0	DOA2	51	0	DOB4	68	-	NC



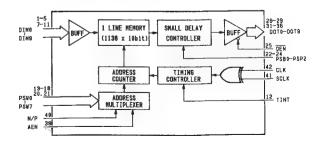


CXK1203Q (SONY)
C-MOS DIGITAL LINE MEMORY



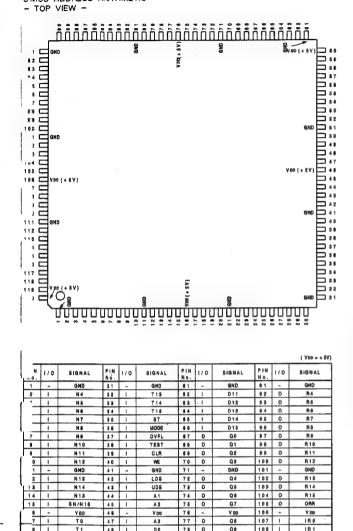
										(	VDD = + 5V
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	1	DO	13		PSW7	25		ŌĒN	37	-	N.C
2	F	DI	14		PSW6	26	0	DOT9	38	-	N.C
3		D2	15	1	PSW5	27	0	DOTS	39	1	AEN
4	1	D3	16	1	PSW4	28	0	DOT7	40		N/P
5		D4	17	1	PSW3	29	0	DOTE	41	-	SCLK
6	-	GND	18	1	PSW2	30	-1	GND	42	J	ÇLK
7		D5	19	-	Voo	31	0	DOT5	43	-	Voo
8		D6	20	I	PSW1	32	0	DOT4	44	-	N.C
9	T	D7	21		PSW0	33	0	DOT3	45	-	N.C
10		D8	22	1	PSB2	34	0	DOT2	46	-	N.C
11		D9	23		PSB1	35	0	DOT1	47	-	N.C
12	1	TINT	24	1	PSB0	36	0	DOT0	48	-	N.C

AEN LINE NENDRY SELECT
CLUX
DINO-DING TUDEO DATA IMPUT
DOTO-DOTS TYDEO DATA GUTPUT
N/P
WISC/PALSEGAN SELECT
OFN
PSBO-PSBC : DELAY STEP SELECT(1 BITXM)
FSBC - DELAY STEP SELECT(8 BITXM)
TINT
TINT
TEST



(D8262Q (SONY)

- MOS ADDRESS ARITHMETIC - TOP VIEW -



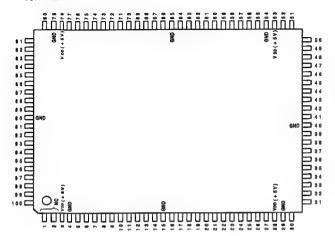
N	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	-	GND	81	-	GND	8 1		GND	91	-	GND
2	1	N 4	5 2	1	T13	8 2	1	D11	9 2	0	R4
٦	1	N 5	3 3	1	T14	8.8	. 1	D12	8.3	0	PL6
	1	N 6	3.4		T18	8.4	1	D13	9.4	0	R8
	1	N7	3.5		8.T	8.5	1	D14	0.5	0	R7
	1	N 8	3.6	1	MODE	8.6	1	D15	9.6	0	R.B.
7	1	Ne	37	1	DVFL	8.7	0	0.0	8-7	0	Re
8	T	N1D	3.0	1	TEST	8.6	0	Q1	9.9	0	R10
8	1	N11	3.9	ī	CLR	8.9	0	02	0.0	0	B11
0	-	N12	40	Ī	WE	7.0	0	Q3	100	0	R12
1	-	GND	41	-	GND	71	-	GND	191	-	GND
2	1	N13	4.2	1	LD8	7.2	0	Q4	192	0	R13
1 3	1	N14	43	1	UDS	7.8	٥	Q6	103	0	R14
1.4		N18	44		A1	7.4	0	QB	104	0	R15
1.6	1	SN/N18	4.5	1	A 2	7.8	٥	Q7	185	0	ORR
6	-	Vap	4.6	-	V pp	7.6	-	V 00	106	-	V pp
7	ı	TO	4.7		A 3	77	٥	Qs	107	1	180
8	1	Ti	4.8	1	DO	7.8	0	Qs	108		IR1
0	1	T2	4.9	1	D1	7.8	0	Q10	100	1	8.0
20		T3	5.0	1	D2	80	0	011	110	1	81
21	- 1	GND	5 1	-	GND	8.1	-	GND	111	-	GND
2 2	1	T4	6.2	1	DS	8.2	0	012	112	1	CK
3	1	Tā	6.3	T	D4	8.3	٥	Q1S	113		8 2
4	1	T 6	5.4	T-	D5	84	0	Q14	114	-	83
6	1	T7	6.6	1	De	8.5	0	Q15	115	1	814
2 6	1	TB	3.6	1	D7	8.6	0	ORQ	116	1	NO
27	1	T9	5.7	1	D8	8.7	0	R0	117	-	N1
28	1	T10	5.0	i	Dis	0.6	0	R1	118	1	N2
0	1	T11	6.0	Ť	D10	6.0	0	R2	119	1	Na
0	i	T12	80	-	Vpp	9.0	0	Ra	120	-	Voe

1 1 8	NO	Qo	67
117	N 1	Q1	6.8
118	N2	Q2	6.9
119	N3	03	70
2	N4	04	72
3	Nő	Qā	7.8
4	N a	Qe	7.4
5	N7	Q7	7.6
6	N B	QB	77
7	NO	Qs	7.8
	N19	Q18	7.9
9	N11	Q11	8 0
10	N 12	Q12	
12	N13 N14	Q13	8.3
13	N14	Q14	8 5
14	N 1 5	Q15	
1.7	TO	Ro	87
18	T1	R1	8.8
19	T2	R2	8.0
2.0	Ta	R3	9.0
5.5	T4	84	9.2
2.8	T 6	R5	0.3
2.4	T 6	R6	9.5
2.5	T7	R7	9 6
26	T 8	R6	9.7
2.0	TB	Re	9 8
21	T10	R10	**
30	T11	R11	100
32	T12	A12	102
33	T13	R13	103
34	T14	R14	104
_	T15	N 16	
48	0.0	ONO	105
8.0	D1	ORA	<u>۳</u>
5 2	DS		4.0
5 3	D3	WE	4 8
5.4	D4	uns	42
5 5	D &	LD8	P-
5 6	9.0	80	108
57	07	81	110
5.8	08	8.2	113
5 8	01	8 3	114
8.2	D18	SM	118 18
8.3	D12	2N/N16	3 6
8 4	018	\$T	_
6.5	D14	180	107
8.6	D18	18.1	108
4.4		MODE	3 6
4.5	A1 A2	OVFL	3.7
47	AZ A3		3 8
112	r.°	TEST	30
14	>	CLR	<u> </u>
			•

1 NPUT ; INTERNAL REGISTER ADDRESS CK CLR CK : CLOCK
CLR : INTERNAL REGISTER CLEAR
De-D15 : INTERNAL REGISTER DATA
IRe : ORQ-ORR OUTPUT CONTROL AT PACE-PECTIVE MODE
IR1 : OORG-ORR OUTPUT CONTROL AT TURN OVER PAGE MODE
LOS : LOWER DATA STROBE
MODE : MODE SELECT
(G:PACE-PECTIVE MODE, 1:TURN OVER PAGE MODE) NO-N15 ; N DATA PORT ND-N15 : N DATA PORT
OVEL : OVERFLOW
: OVERFLOW
: SHIFT MUMERICAL PORT
SM : SHIFT MODE SELECT
(0:RIGHT SHIFT MODE, 1:LEFT SHIFT MODE)
SN/N16 : PACE-PECTIVE MODE: N DATA CODE
TURN OVER PAGE MODE: N DATA CODE
TURN OVER PAGE MODE: DATA CODE
TURN OVER PAGE MODE: DON'T CARE
T0-T15 : T DATA PORT
TEST : TEST TERMINAL
LUBS : UPPER DATA STAGE UDS : UPPER DATA STROBE : WRITE ENABLE OUTPUT ORQ : Q DATA CLIPPING SIGNAL
ORR : R DATA CLIPPING SIGNAL
Q0-Q15 : Q DATA PORT
R0-R15 : R DATA PORT



CXD8263Q (SONY)
C-MOS VARIABLE LOW PASS FILTER
- TOP VIEW -

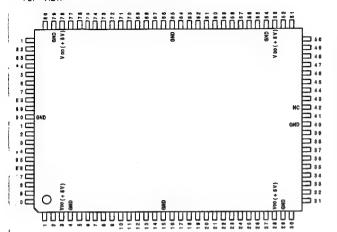


PIN No.	1/0	SIGNAL									
1	-	NC	26	T	IEO	51	1	104	7.8	0	082
2	-	NC	2.7	1	1 IE1	5.2	1	108	77	0	088
3	-	VDD	28	-	DOV	5.5	-	V pp	78	-	V 00
4	-	GND	2.0	-	GND	54	-	GND	78	-	GND
8	1	IH 4	30	1	IE2	6.6	1	ICO	8.0	0	084
6	1	1H 8	31	1	IE3	5.6	1	107	81	0	QB5
7	1	IH 6	8 2	1	164	67	1	180	8.2	0	086
•	-	IH7	8.8	1	166	6.8	1	181	8.3	0	087
	ī	19.0	34	1	· 1E6	6.9	1	182	84	1	8080
10	ı	16.1	3.5	1	187	80	1	183	0.5	1	8081
11	1	10.2	3.5	1	100	81		184	8.5	0	OAO
12	1	I G B	3 7	ī	101	6.2	1	186	87	0	OA1
13	1	19.4	8.8	I	102	63	- I	186	8.8	0	OA2
1.4	1	19.5	3.0	T	IDS	64	1	197	89	0	DAS
1.5	-	GND	40	-	GND	8.6	-	GND	9.0	-	GND
16	1	19.6	4.1	1	ÇK	8.6	1	IAD	9.1	0	OA4
17	1	197	42	Т	MODE	67	1	IA1	9.2	0	OA5
18	+	IFO	43	1	ID4	8.6	1	1 A 2	93	0	DAG
1.0	- 1	IF1	44	1	106	8.9	1	IAS	9.4	0	QA7
20	1	IF2	4.6	T	104	7.0	1	18.4	9.5		80A0
21		IF S	4.8	1	107	71	1	IAB	9.6		80A1
22	1	IF4	47	1	100	72	1	IA B	9.7	1	1 H D
2.8	1	IF 5	48	1	101	7.8	1	1A7	9.0	1	IH 1
24	T	IF6	49	1	102	7.4	0	OBO	9.9	1	1 H 2
2.5		IF?	8.0	1	ICS	7.6	0	081	100	1	1113

73	IA7	OA7	9.4	INPUT			
72		OAS	0.3	CK	CLOCK		
71	146		9 2		A DATA PORT		
70	1 A 5	OA5	9 1		B DATA PORT		
6.9	1 A 4	UA4	6.9		C DATA PORT		
68	IA8	OAS	0.0		D DATA PORT		
67	1 A 2	UAZ	8.7		E DATA PORT		
	IA1	OA1	8.6				
	IAC	OAD			II DATA PORT		
6 4	187	087	8.3		8 DATA PORT		
89	186		8.2		H DATA PORT		
62					MODE SELECT (0:COMP		INTEGER MODE)
6 1	185	085			DAG-DAT DUTPUT DATA		
60	184	084	77	8080,6081	OB0-OB7 OUTPUT DATA	SELECT	
5.0	183	083	7.6				
5.8	182	QB2	7 6	OUTPUT			
57	IB1	081	74	0A0-0A7	A DATA PORT		
	180	OBO	<u> </u>	080-087	E DATA PORT		
6.6	107						
5 5	108		l				
5 2	ICS		l				
			l				
4.0	IC4		l				
••	103		l				
4.8	ICS		l				
47	101		Į.				
	ICO		l l				
4.6	107	80A1	9 6				
4.5	106	SOAG	9.6				
4 4	105	40110					
43 38 38		8081					
3 8	104	8080	8 4				
18	ID8		4 2				
37	102	MODE	4 1				
3 6	₹D1	<					
	100		l .				
3 5	IE7	167	17				
3.4	IE 6	186	16				
33	168	165	14				
32	1E4	164	13				
3 1	168	103					
3 0	162	162					
27	_		1 0				
2 0	IE1	161	0				
	120	160	_				
2 5	1 F 7	1H7	8 7				
24		EH #					
2 3	188	185	8				
23	184	1814	6				
21	150	1113	100				
5.0	1 F 2	111 2	9.0				
1.0		. 11 &	le s				

(D8265Q (SONY)

- TOP VIEW -



											( V DD = +
PIN D.	1/0	BIGNAL	PIN No.	1/0	BIGNAL	PIN No.	1/0	BIGNAL	PIN No.	1/0	SIGNAL
		WE	2.6	1	T1	8.1	1	D21	7.6	1	W20
-	1	LHS	27	1	12	8.2	1	D22	7.7	1	W21
	-	V DD	2.6	-	V pp	5.3	-	V 00	7.8	-	VDĐ
4	-	GND	2.9	-	GND	5.4	-	GND	7.0	-	GND
8	0	Q0	30	0	Q8	5 8	0	Q4	8.0	0	Q7
3	ţ	CDS	8.1	ı	D00	8.6	- 1	D28	8.1		M30
,	ì	CD1	9.2	1	D01	6.7	1	D24	8.2	1	M91
	1	CD2	3.5	1	D08	5.8	1	D25	8.3	1	XCe
	1	CDS	3 4	1	Dos	5.9	1	D26	0.4	1.	XC1
10	ī	CD4	3.5	1	D04	80	1	D27	0.5		XCS
11	1	CDS	8.6		DOS	61	1	D30	8.6	1	XCS
12	1	CDS	37	1	D06	8.2	1	D31	87	1	XG4
3	1	CD7	3.8	1	D87	8.3	1	Das	8.8	1	YCO
4	0	Q1	3 9	1	D10	8.4	0	QS	8.0		YCI
5	-	GND	4.0	-	GND	6.6	-	GND	9.0	- 1	GND
16	0	Q2	4.1	1	CK	6.6	0	Q8	91	0	QB
17	1	CDS	42	-	NC	6.7	1	DSS	9.2	1	A CS
1.6		CD9	43	1	D11	8.6	1	D84	93		YCS
9	1	CD10	44	1	D12	8.0	1	D85	9.4	1	YC4
0	1	QD11	4.8	ī	D18	7.0	1	D36	9.5	1	xc
1		GD12	46	1	D14	71	1	D37	9.6	1	YC
- 2	1	CD13	47	1	D18	72	1	MOD	87	1	PC
23	1	GD14	4.8	1	D16	73		MD1	9.8	1	A 0
24	1	CD16	49	1	D17	74	L	M10	9.9	1	A1
2.6	1	7.0	5.0	1	020	7.5	1	M11	100	1	A2

	7 2	1 7	2 2		5 6	1	
	8	10 3	Ξ	M 20	M 30	83	
8.1	D00	3 3	. 3	2 3	3	20	5_
3 2	D01					Q1	14
3 3	D 0 2					Q2	18
3 4	Des					Q3	30
3.5	D 0 4					Q4	5 5
3 6	Des					Q5	84
3 7	Des					Q6	8.8
3.8	D87					Q7	80
3.0						Q8	81
43	D 10						
4.4	011						
4.5	D12						
4.8	D13						l
4.7	D14						l
4.8	D15						l
4.9	D16						
50	1017						l
51	D20						l
5 2	D21						
5 8	D22						41
57	D 23					<	-
5 8	D24						2
5 9	D25				- 1	.H\$	
6.0	D 2 6					AO	9.8
_	D27					A1	9.8
6.1	D38					AZ	100
8.2	031						1
6.3	D32					WE	_
8.7	D 8 8					CDO	8
6.8	D84					CD1	7_
8.9	D35				-	DD2	8
7.0	D36					CD3	9
7.1	D37					CD4	10
9.5						CD5	11
9.6	XC				- (	CD6	12
8 7	YC				- (	007	13
-	PC					CDE	17
8.3					- (	CDS	-
8 4	XCO				C	D 10	18
8.5	X01				C	011	21
8.6	XC2 XC3				G	D12	22
8.7	XG8 XG4				C	D 13	23
	۱^°°				C	D 14	24
0.0	Y CO				C	D16	
9 2	Y 01						2 5
93	Y C2					TO	2 6
9.4	Y C3					T1	27
	YC4					T2	<u> </u>
	_					_	•

IMPUT

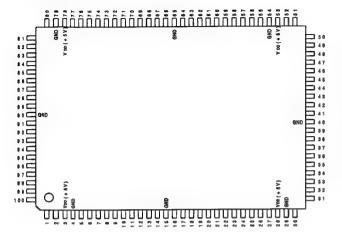
AO-A2 : REGISTER SELECT ADDRESS
CD0-CD15 : WRITE DATA TO REGISTER
CK : SYSTEM CLOCK
D00-D07 : IMAGE DATA (X:EVEN, Y:EVEN)
D10-D17 : IMAGE DATA (X:EVEN, Y:ODD)
D30-D37 : IMAGE DATA (X:DDN, Y:EVEN)
D30-D37 : IMAGE DATA (X:DDN, Y:ODD)
LHS : REGISTER ASSIGN ADDRESS CHANGE
M00,M01 : CONTROL SIT (X:EVEN, Y:EVEN)
M10,M11 : CONTROL SIT (X:EVEN, Y:EVEN)
M20,M21 : CONTROL SIT (X:DDN, Y:ODD)
M30,M31 : CONTROL SIT (X:DDN, Y:ODD)
M30,M31 : CONTROL SIT (X:DDN, Y:ODD)
T0-T2 : OPERATE MODE SELECT
WE : WRITE EMARLE FOR REGISTER
XC0-XC4 : X DIRECTION INTERPOLATION DATA
COUTPUT

Q0-08 : RESULT DATA

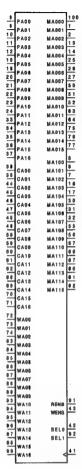


CXD8266Q (SONY)

C-MOS MEMORY ADDRESS BUS CONTROL
- TOP VIEW -



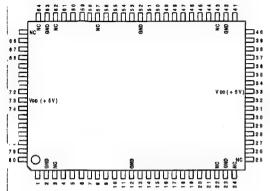
PIN No.	1/0	SIGNAL	PIN No.	1/0	BIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL
1	0	MAGGT	2.6	0	MAGOS	51	0	MACOD	7.6	0	MA014
2	0	MA002	2.7	0	MA007	82	0	MAG10	77	0	MA015
a		Vop	2 8	-	V pp	8.8	-	V ap	78	-	V 00
4	-	GND	2.9	-	GND	84	-	GND	7.9	-	GND
Б	0	MA100	3.0	0	₩A108	5.6	0	MA108	8.0	0	MA118
8	0	MA101	31	0	MA108	6.6	0	MA109	81	0	MAT14
7	0	MA102	3 2	0	MA107	6.7	0	MA110	8.2	0	MA115
8	1	PAGO	33		PA12	6.8	1	CAGS	0.3	1	WADS
1	1	PA01	34	1	PA13	8.8	1	CAOS	84	1	WA04
10	1	PA02	3.5	1	PA14	80	1	CA10	8.6	1	₩A05
11	1	PAGS	3.6	ī	PA15	81	1	CA11	8.6	1	WA06
12	1	PA04	37	1	PA16	8.2	1	CA12	87	T	WA07
13	0	MADOS	3.8	1	CAOO	8.3	0	MA011	8.0		WAGS
14	0	MAD04	3.9	1	CA91	6.4	0	MA012	8.9	1	WAGG
1.5	-	GND	40	-	GND	8.5	-	GND	9.0	-	GND
1.6	0	MA103	41	1	CK	8.6	0	MA111	9.1	1	RENB
17	0	MA104	42	1	SELO	67	0	MA112	9.2	1	8EL1
1.8	Ī	PA05	4.3	1	WENB	8.8	1	CA19	9.3	1	WA10
1.8	1	PAGE	4.4	1	CAOS	8.8	1	CA14	9.4	1	WA11
20	1	PA07	4.6	1	CAGS	7.0	1	CA15	9.5	1	WA12
21	1	BOAG	4.6	1	CA04	71	1	CA18	9.6	1	WA13
22	1	PAGE	47	Ti.	CADS	72	1	WADD	97	1	WA14
23	1	PAID	48	ī	CASS	73	1	WA01	9.8	1	WA15
24	1	PA11	4.9	T	CA07	7.4	1	WA02	9.9	1	WA18
25	0	MACOS	8.0	0	MACOS	7.5	D	MAD13	100	0	MA000



00	MAGGO 100	I NPUT				
01	MA001 1	CASS-CA	16 ;	READ ADD	RESS FRO	MEMORY
02	MA002 2	CK	;	SYSTEM (	CLOCK	
03	MA003 1 3	PAGG-PA	16 ;	READ ADD	RESS FRO	YROMAN WC
04	MA004 14	RENB		LATCH E	ABLE FO	R READ SYSTEM
05	MA005 25	SELO		READ/WR	ITE CHAN	GE
08	MA006 2 6			_		
07	M A 007					MA1
08	MA008 50			_		RITE
08	MA009 5 1			1 W	RITE R	EAD_
10	MA010 52	SEL1	;	READ ADI	DRESS SE	LECT
11	MA011 83			(0:PA MC	DE, 1:0/	A MODE)
12	MA012 64	WA00~WA	116 ;	WRITE AD	DRESS TO	MEMORY
18	MA013 75	WENS	;	LATCH ER	ABLE FO	R WRITE SYSTEM
14	MA014 7 6					
16	MA015 77	OUTPUT				
	MAGIS .	M A000-M	A015 :	READ/WR	ITE ADDR	ESS
16	MA100	MA100-M	A115 :	READ/WR	ITE ADDR	ES8
9.0	MA101					
01	MA102					
36	MA103	CON	TROL	061	PUT	]
08	MA104 77	SELO	SEL1	MAG	MA1	]
04	MA105	0	0	PA OUT	WA DUT	]
0.6	MA108 31	0	1	CA DUT	WA DUT	1
08	MA107 32	1	0	WA OUT	PA OUT	]
07	MA108 5 5	1	1	WA OUT	CA OUT	1
08	MA109 5 6			-	•	•
0.0	MA110 57					



... MOS MEMORY DATA BUS CONTROL - TOP VIEW -

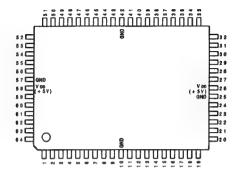


											( V 00= + 5V)
PIN No.	170	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL
	0	8D00	2 1	0	8 D 0 6	4.1	0	8010	8.1	0	8016
	-	GND	2 2	-	NC	4 2	_	GND	0.2	-	NC
	-	NC	2 3	-	GND	43	-	NC	6.3	-	GND
1 4	0	8001	24	-	NC	4.4	0	8011	84	-	NC
8	1/0	RD20	2.5	-	NC	4.5	1/0	RD30	8.5	-	NC
8	1/0	RD21	2 6	0	8D07	4.6	1/0	RD31	0.0	0	SD17
	1/0	RD22	27	1/0	8D25	47	1/0	RD32	6.7	1/0	RD35
	1/0	RDOS	2.8	1/0	8028	4.6	1/0	RD13	6.8	1/0	RD36
	1/0	RD04	2.0	1/0	8D27	4.9	1/0	RD14	8.0	1/0	RD37
	0	8D02	8.0	1	WD0	6.0	0	SD12	7.0	)	WD4
11	0	8008	8 1	1	WD1	61	0	8018	71	. }	WDS
12	-	GND	3 2	1	WD2	6.2	-	GND	72	1	WD6
3	0	SD04	3 3	-	V 00	6.8	0	8D14	7.3	-	V 00
4	0	8006	34	1	WDS	6.4	0	8D15	7.4	1	WD7
8	1/0	RD23	8.5		RCK	6.6	1/0	RD38	7.8	1	WCK
5	1/0	RD24	3 6	1	RENB	6 6	1/0	RD34	7.6	1	WEND
17	1	MODE	37	1	SELO	67	-	NC	7.7	1	SEL1
1.8	1/0	RDOS	3.8	1/0	RD10	5 B	1/0	RD18	7.8	1/0	RDOS
1.9	1/0	RD06	3.9	1/0	RD11	6.0	1/0	RD18	7.9	1/0	RD01
0	1/0	RD07	40	1/0	RD12	60	1/0	RD17	80	1/0	RD82

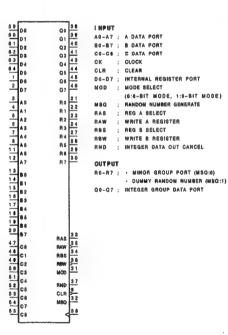
·		
7.8 BD0	8000	INPUT
7 9 RD0	8001	MODE ; DATA BUS CONTROLLER/BELECTOR CHANGE
BOLADO	8 8002 10	(C:DATA BUS CONTROLLER, 1:2 TO 1 SELECTOR)
RDO	111	RCK : CLOCK FOR READ SYSTEM
RDO	1 1 1	RENB : LATCH ENABLE FOR SD00-SD07,SD10-SD17
RDO	11.4	SELO : READ/WRITE CHANGE (DATA BUS CONTROLLER MODE)
14 RD	121	
20 RD	128	RD0 · RD1 RD2 · RD3
38	" ""	0 READ WRITE
RD1	0 8D10 41	1 WRITE READ
RD1	1 8D11 44	· 8D0 OUTPUT DATA SELECT (SELECTOR MODE)
RD1	2 BD12 50	(0:RD1, 1:RD3)
I ROI	8 BD13 5 1	BEL1 : 8D1 QUTPUT DATA SELECT (SELECTOR MODE)
49 RD1	4 BD14 8 8	WCK ; CLOCK FOR WRITE BYSTEM
- SURDI	6 BD15 54	WDG-WD7 : MEMORY WRITE DATA
5 0 RD1	8 8D18 61	
RD1	7 SD17 66	WENB ; LATCH ENABLE FOR WDD-WD7
1	1	OUTPUT
RDS	MODE -	
7 RDS	8FI 0 37	8D00-8D07,8D10-8D17 ;
1 5 R D 2	12 8EL1 77	READ DATA OUT FROM MEMORY
18 RDS	REND 3 6	
, RDS	14 RCK 3 8	I NPUT/ OUTPUT
RDS	15 """	RD00-RD07,RD10-RD17,RD26-RD27,RD30-RD37;
RDS	8 WENB	READ DATA IN/WRITE DATA OUT
RDS	7 WOK 7 8	
4.5 RDS	110	
4 B RD	100 14.5	
4.7	19.9	
RDS	4.4	
RDS	7.0	
RDS	17.1	
6 B RDS	18 WU0 7.9	
6 9 RD	17.4	

CXD8276Q (SONY)

C-MOS LINEAR INTERPOLATION - TOP VIEW -

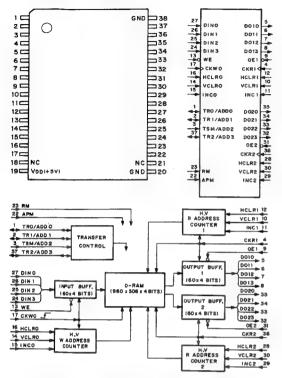


											( V DD = + 5V
PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGNAL	PIN No.	1/0	SIGANL	PIN No.	1/0	SIGNAL
1	1	De	17	1	84	33	1	RAS	4.9	1	CS
2	1	D7	1.6	1	85	3.4	1	R66	5 0	1	C8
3		AU	18	T	84	3.5	1	RAW	5 1	1	G4
4		A1	2.0	1	87	3.6	1	RBW	6 2	1	C S
6		A2	21	0	RO	37	1	AND	6.3	1	C#
6		AS	2 2	0	R1	38	0	20	6.4		C7
7	1	A4	23	0	R2	3.0	0	Q1	5.5	1	Ce
8	1	A 5	2.4	0	RS	40	0	02	6.6	1	CK
	1	CLR	2.5	-	GND	41	0	QS	6.7	-	QND
1.0	- 1	GND	26	-	V 00	4 2	-	GND	5.0	-	V pp
11	1	AB	27	0	R4	43	0	Q4	5.9		DO
12	1	A7	2.0	0	R5	44	0	QS	8.0	.1	D1
13	1	B 0	2.9	0	R6	4.6	0	Qe	61	1	D2
14	1	81	30	0	A7	4.6	0	07	6.2	.1.	DS
1.6	1	B 2	31	ı	MOD	47	1	CO	8.3	1	D4
16	1	8.1	32	1	MSQ	48	1	C1	6.4	1	Dá





CXK1206AM (SONY) FLAT PACKAGE
C.MOS VIDEO FIELD MEMORY (960-COLUMNx306-ROWx4-BIT)
- TOP VIEW -

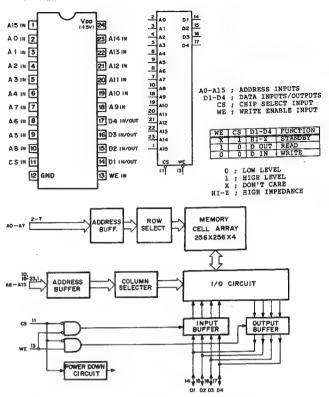


PIN	SIGNAL	DESCRIPTION
1	TPO/ADDO	W PORT 0 TRANSFER SYNC I/O, ADDRESS 0 INPUT
2	TRI/ADDI	R PORT 1 TRANSFER SYNC I/O, ADDRESS 1 INPUT
3	TSM/ADD2	TRANSPER SYNCEPONOUS MODE. ADDRESS 2 INPUT
4	CKR1	P PORT 1 SHIFT SIGNAL INPUT
5	DOLD	R PORT 1 SHIFT SIGNAL INPUT R PORT 1 DATA 0 OUTPUT R PORT 1 DATA 0 OUTPUT R PORT 1 DATA 2 OUTPUT
5 6 7	DO11	R PORT 1 DATA 1 OUTPUT
ž	DO12	R PORT 1 DATA 2 OUTPUT
R		
ě	OE1	R PORT 1 OUTPUT ENABLE INPUT
10	VCLR1	R PORT 1 VERTICAL CLEAR INPUT
ii	INCl	R PORT 1 LINE INCREMENT INPUT
12	HCLR1	R PORT I OUTPUT ENABLE INPUT R PORT I VERTICAL CLEAR INPUT R PORT I LINE INCREMENT INPUT R PORT I HORIZONTAL CLEAR INPUT
13	WE	W PORT 0 WRITE ENABLE INPUT
14	VCLRO	W PORT D VERTICAL CLEAR INPUT
15	INCO	W PORT O LINE INCREMENT INPUT
16	HCLRO	W PORT 0 LINE INCREMENT INPUT W PORT 0 HORIZONTAL CLEAR INPUT W PORT 0 SHIFT SIGNAL INFUT
17	CKWO	W PORT O SHIFT SIGNAL INPUT
18	NC	(no connection)
19		+5V INPUT
20	GND .	GND
21	NC	(no connection) ADDRESS PRESET MODE INPUT RECURSIVE MODE ENABLE INPUT
22	APM	ADDRESS PRESET MODE INPUT
23	RM	RECURSIVE MODE ENABLE INPUT
24	DIN3	W PORT 0 DATA 3 INPUT
25	DIN2	W PORT D DATA 2 INPUT
26	DINL	W PORT D DATA 1 INPUT
27	DINO	W PORT 0 DATA 0 INPUT
28	HCLR2	W PORT 0 DATA 0 INPUT R PORT 2 HORIZONTAL CLEAR INPUT R PORT 2 LINE INCREMENT INPUT
29	INC2	R PORT 2 LINE INCREMENT INPUT
30	VCLR2	R PORT 2 VERTICAL CLEAR INPUT
31	OE2	R PORT 2 OUTPUT ENABLE INPUT
32	DO23	R PORT 2 DATA 3 OUTPUT
33	DO22	R PORT 2 DATA 2 OUTFUT
34	DO21	R FORT 2 DATA 3 OUTFUT R FORT 2 DATA 2 OUTFUT R FORT 2 DATA 1 OUTFUT
35	DO20	R PORT 2 DATA 0 OUTPUT
36	CKR2	R PORT 2 SEIFT SIGNAL INPUT
37		R PORT 2 TRANSFER SYNC I/O, ADDRESS 3 INPUT
38	GND	GND

M		ELECT	ION			
1	CONT					
-	INPU	TS	TS	TR/A		MODE
	RM	APM	TSM	TR ADD 0-3		1000
	0	0	0	OUT- PUT	-	NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT
	0	0	1	IN- PUT	-	NON RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT
	0	1	-	-	IN- PUT	NON RECURSIVE MODE, ADDRESS PRESET MODE
	1	0	0	OUT- PUT	-	RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE OUTPUT
	1	0	1	IN- PUT	-	RECURSIVE MODE, TRANSFER SYNCHRONOUS MODE INPUT

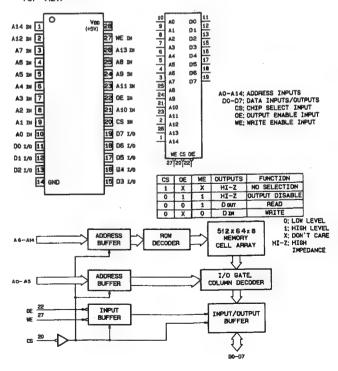
0:LOW LEVEL 1:HIGH LEVEL

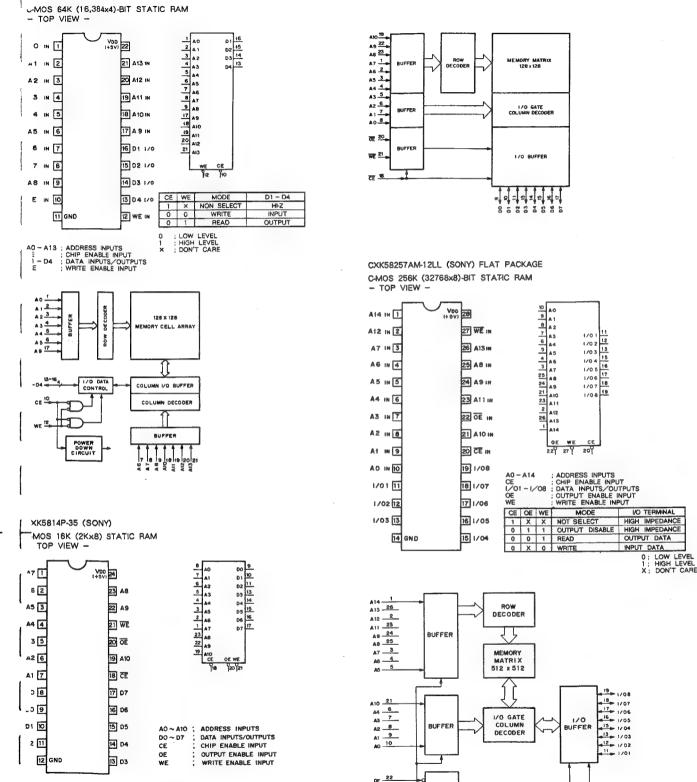
CXK54256P-35 (SONY) (ACCESS TIME = 35nS) C-MOS 256K (65536x4)-BIT STATIC RAM - TOP VIEW -



CXK58258AP-25 (SONY)

C-MOS 256K (32768x8)-BIT STATIC RAM





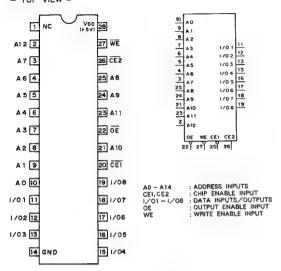
BUFFER

CE -20

XK5464AP-35 (SONY)

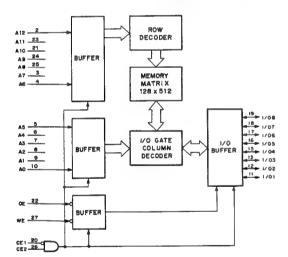
# CXK5863P-25 (SONY)

C-MOS 8192-WORDx8-BIT HIGH SPEED STATIC RAM - TOP VIEW -



CE1	CE2	OE	WE	MODE	I/O TERMINAL
1	Х	Х	Х	NOT SELECT	HIGH IMPEDANCE
Х	0	Х	X	NOT SELECT	HIGH IMPEDANCE
0	1	1	1	OUTPUT DISABLE	HIGH IMPEDANCE
0	1	0	1	READ	OUTPUT DATA
0	1	×	0	WRITE	INPUT DATA

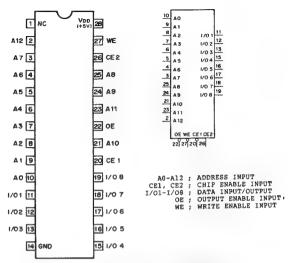
0 : LOW LEVEL 1 : HIGH LEVEL X : DON'T CARE



### CXK5864BSP-70L (SONY)

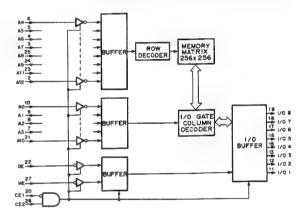
C-MOS 64K (8192x8)-BIT STATIC RAM - TOP VIEW -



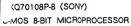


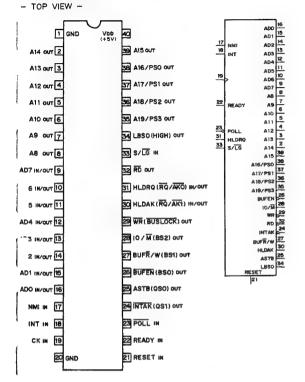
CEL	T CE2	OE	TWE	MODE	I/O TERMINAL	
1	X	X	X	NOT SELECT	HIGH IMPEDANCE	
X	Ö	X	X	NOT SELECT	HIGH IMPEDANCE	
Ö	1	1	1	OUTPUT DISABLE	HIGH IMPEDANCE	0;LO
Ö	1	0	1	READ	OUTPUT DATA	1; HI
0	1	X	0	WRITE	INPUT DATA	X;DO

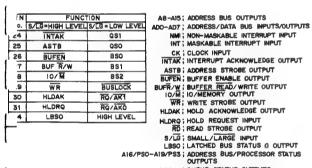
W LEVEL IGH LEVEL IN'T CARE











O-A19/PS3; ADDRESS BUS/PROCESSOR STAT
OUTPUTS

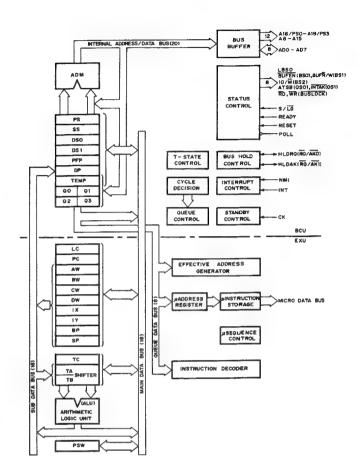
QS0,1; QUEUE STATUS OUTPUTS

BS0-B82; BUS STATUS OUTPUTS

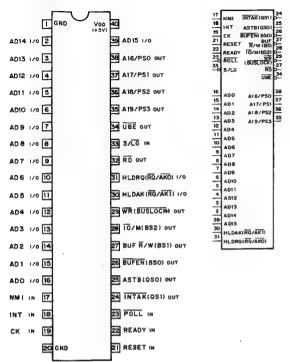
BUSLOCK; BUS LOCK OUTPUT

RQ/AKO,1; HOLD REQUEST/ACKNOWLEDGE

HOLD REQUEST/ACKNO



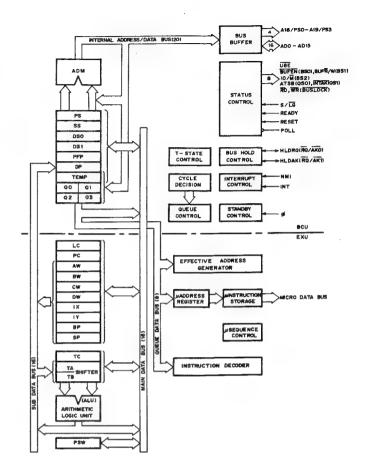
CXQ70116P-10 (SONY)
C-MOS 16-BIT MICROPROCESSOR
- TOP VIEW -



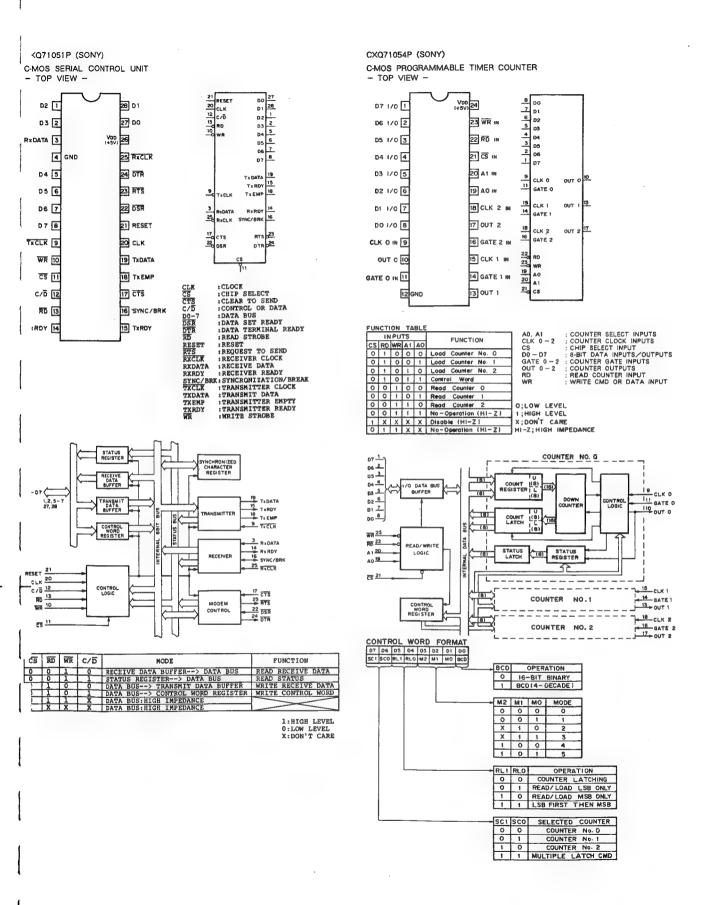
AD15-AD0 ; ADDRESS/DATA BUS

NMI ; NON-MASKABLE INTERRUPT
INT ; MASKABLE INTERRUPT
CK ; CLOCK
INTAK ; INTERRUPT ACKNOWLEDGE
ASTB ; ADDRESS STROBE
BUFEN ; BUFFER READ/WRITE
IO/M ; D UFFER READ/WRITE
IO/M ; D WEFER READ/WRITE
IO/M ; TO MEMORY
WR ; WRITE STROBE
HLDAK ; HOLD ACKNOWLEDGE
HLDAK ; HOLD ACKNOWLEDGE
HLDRC ; HOLD REQUEST
RD ; READ STROBE
S/LG ; SMALL/LARCE
OBE ; UPFER BYTE ENABLE
A19/PS3-A16/FS0 ; ADDRESS BUS/FROCESSOR STATUS
QS1, 0 ; QUEUE STATUS
BS2-BS0 ; BUS STATUS
BUSLOCK ; BUS LOCK
RQ/AK1, 0 ; HOLD REQUEST/ACKNOWLEDGE

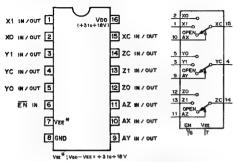
PIN	FUNCT	
	S/LG=HIGH LEVEL	S/LG=LOW LEVEL
24	INTAK	QS1
25	ASTB	QSO
26	BUFEN	850
27	SUF R/W	BS1
28	IO/M	B52
29	WR	BUSLOCK
30	HLDAK	RQ/AK1
.31	HLDRQ	RQ/AKO





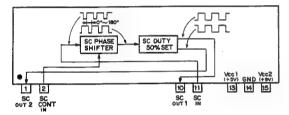


HD14053BFP (HITACHI) FLAT PACKAGE
C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS
- TOP VIEW -

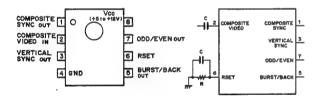


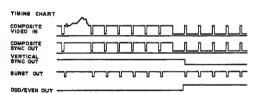
	CON	T. INPUTS	ON
	EN	A (X,Y,Z,)	CHANNEL
O; LOW LEVEL	0	0	0
1 HIGH LEVEL	0	1	1
X: DON'T CARE.	1	X	OPEN

iB-38 (AGC) SC PHASE SHIFTER - REAR VIEW -

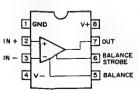


LM1881M (NS) FLAT PACKAGE VIDEO SYNC SEPARATOR - TOP VIEW -





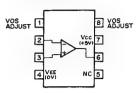
LM311PS (Ti) FLAT PACKAGE VOLTAGE COMPARATOR WITH STROBE - TOP VIEW -



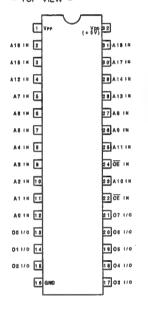
LM358PS (TI) FLAT PACKAGE DUAL OPERATIONAL AMPLIFIERS - TOP VIEW -

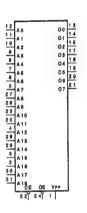


LM6361M (NEC) HIGH SPEED OPERATIONAL AMPLIFIER - TOP VIEW -



M27C4001-12F1 (SGS)
C-MOS 4M-BIT UV EPROM
- TOP VIEW --



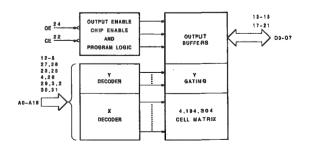


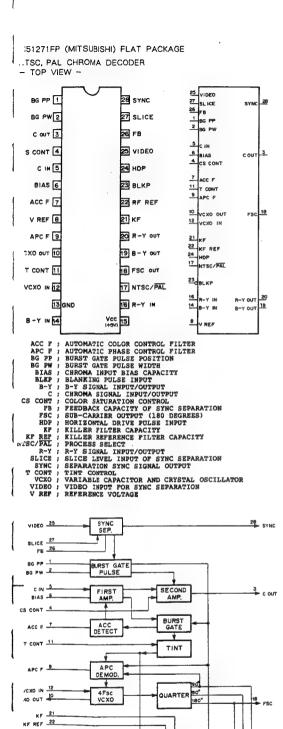
AG-A19:ADDRESS INPUTS
CE : CHIP ENABLE INPUT
00-07 : DATA INPUTS/OUTPUTS
OE : COUTPUT ENABLE INPUT
VPP : PROGRAMMING VOLTAGE INPUT
(+ 12.75 V)

		PII	8 1		MODE
CE	0E	A9	Vpp	00-07	NOOE
0	0	×	x	D OUT	READ
0	1	x	x	H1-2	OUTPUT DISABLE
1	×	×	×	HI-Z	STAND BY
0	1	х	Vpp	DIN	PROGRAM
1	0	×	Vpp	D out	PROGRAM VERIFY
ŧ	1	×	Vpp	HI-Z	PROGRAM INHIBIT
0	0	+ 127	Vpp	CODE	ELECTRONIC SIGNATURE

0 ;LOW LEVEL 1 ;HIGH LEVEL X ;DON'T CARE HI-Z;HIGH IMPEDANCE

					CODE	DATA				
INDENTIFIER	A O	07	08	05	04	03	02	01	00	
MANUFACTURER CODE	0	0	0	1	0	0	0	0	0	5.0
DEVICE CODE	1		Γ,		-	0	0		,	4.1





DETECT

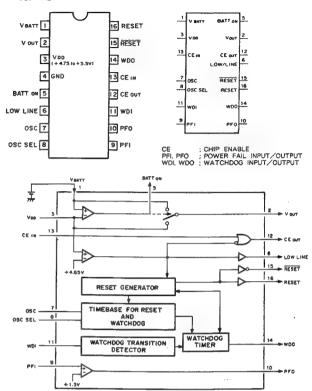
270° ≪

B-Y DEMOD.

ID PULSE

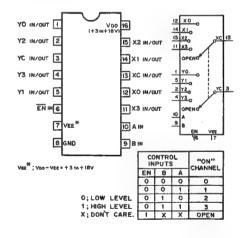
### MAX691CPE (MAXIM)

C-MOS MICROPROCESSOR SUPERVISORY CIRCUITS — TOP VIEW —



MC14052BF (MOTOROLA) FLAT PACKAGE

C-MOS DUAL 4-CHANNEL ANALOG MULTIPLEXERS/DEMULTIPLEXERS - TOP VIEW -

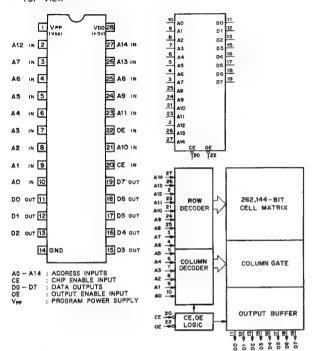




REF. VOLTAGE

### MBM27C256A-25CZ-X (FUJITSU)

C-MOS 256K (32Kx8)-BIT UV ERASABLE PROM WITH 3-STATE OUTPUTS — TOP VIEW —



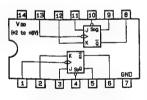
An	CE	ΟE	VDD	Vpp	Dn	FUNCTION	
An	0	0	+5V	+5V	D out	READ	}
An	0	1	+5V	+5V	HI-Z	OUTPUT DISABLE	]
×	1	X	+5V	+5V	HI-Z	STANDBY	
An	0	1	+6V	+12.5V	DIN	PGM	
An	1	0	+6V	+12.5V	D out	PGM VERIFY(1)	O:LOW LEVEL
An	0	0	+6V	+12.5V	Dout	PGM VERIFY(2)	1:HIGH LEVEL
X	1	1	+6V	+12.5V		PGM INH	X:DON'T CARE
AO	0	0	+5V	+5V	DEVICE CODE	ELECTRONIC SIGNATURE*	HI-Z: HIGH IMPE
					* SEE	FOLLOWING DESCRIPTION	
ELEC.	TRONI	C SIG	NATU	RE FOR	F ROM WRIT	ER	
ADD	RESS	SET	TINGS	IN REAL	D MODE		
A	1 - AE	I AS	A10-	-A13	A14, Vpp		

MODULESS .	36111	INGO IN IN	-AD MODE
A1-A8	A9	A10-A13	A14,Vpp
0	127	0	1

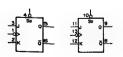
		T		CC	DE 6	ATA				
	AO	D7	D6	D5	04	03	D2	D1	DO	]
MAKER CODE	0	0	0	0	0	0	1	0	0	04H
DEVICE CODE	1	0	1	1	0	0	0	1	0	62H

MC74HC113F (MOTOROLA) FLAT PACKAGE SN74HC113NS (Ti) FLAT PACKAGE

C-MOS J-K FLIP-FLOP WITH SET - TOP VIEW -

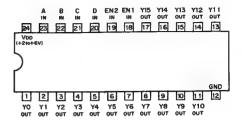


	INP	UTS		OUTF	พาร
So	CK	J	K	Q	ā
0	Х	Х	Х	1	0
i	7	0	0	NO CH	IANGE
1	7	0	1	0	1
1		1	0	1	0
1 *	7	1	1	TOG	GLE
1	1	X	Х	NO C	LANGE
1	0	X	Х	NO CI	IANGE
1	5	Х	Х	NO C	LANGE
	LEV SH LE		X; DON	'T CARE	



#### MC74HC154N (MOTOROLA)

C-MOS 4-TO-16 LINE DECODER/DEMULTIPLEXER - TOP VIEW -



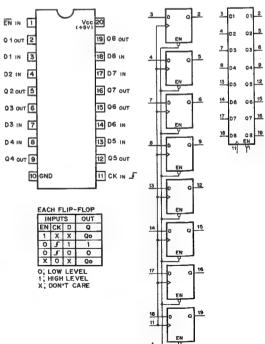


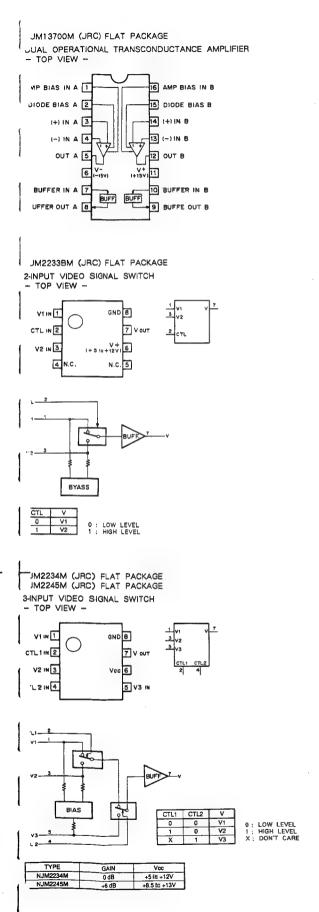
_						OUTPUTS								_							
<u> </u>			JTS			_		_	_	_						_	_				
EN	EN2	D	С	В	Α	Y15	Y14	Y13	Y12	Y11	Y10	Y9	Y8	Y7	Y 6	Y5	Y4	Y3	Y2	YI	YO
0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
0	0	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
o	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1
0	0	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
ō	0	٥	1	0	i.	1	1	l i	l i	ı	1	1	1	1	1	0	1	1	1	1	1
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×	١,	ı,	×	x	ı,	I۲	H	L'	I í	H	L:	1:	H	H	1 :	H	Li	1	l i	Ιi	l i
I î	IJ	≎	I¢.	10	10	1:	L:	1:	1:	L:	L	Ι'n	I :	Lί	l i	1 ;		Ιi	l i	Ιì	1

- O; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

# N74F377N (SIGNETICS)

TTL D-TYPE FLIP-FLOP WITH ENABLE - TOP VIEW -





3-INPUT VIDEO SIGNAL SWITCH - TOP VIEW -GND B V1 IN 1 CTL1 IN 2 Vcc 6 5 V3 IN CTL2 m 4 CTL1 - Z

TYPE	GAIN	Voc
NJM2235M	0 dB	+5 to +15V
NJM2246M	+6 dB	+4.75 to +13V

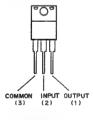
NJM2235M (JRC) FLAT PACKAGE NJM2246M (JRC) FLAT PACKAGE

NJM78L05A (JRC) +5V (100mA) NJM78L09A (JRC) +9V (100mA) POSITIVE VOLTAGE REGULATOR



2 3 4 Vcc

NJM7905FA (JRC) - 5V NJM7909FA (JRC) - 9V NEGATIVE VOLTAGE REGULATOR - FRONT VIEW -

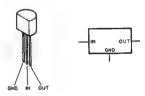




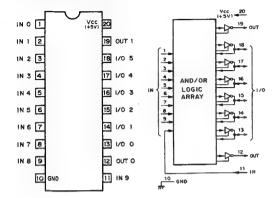
NJM360M (JRC) FLAT PACKAGE HIGH SPEED VOLTAGE COMPARATOR (TTL OUTPUT) - TOP VIEW -



NJM79L09A (JRC) - 9V NEGATIVE VOLTAGE REGULATOR (100mA)

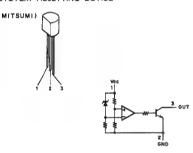


# PAL16L8BCN (AMD/MONOLITHIC MEMORIES) PROGRAMMABLE LOGIC DEVICE - TOP VIEW -



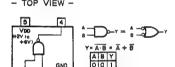
\* ABOVE DIAGRAM SHOWS CONDITIONS BEFORE PROGRAMMING.

### PST523C (MITSUMI) 4.5V SYSTEM RESETTING DEVICE

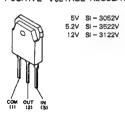


REF.; REFERENCE VOLTAGE

SC7S00F (MOTOROLA) FLAT PACKAGE C-MOS 2-INPUT NAND GATE - TOP VIEW -



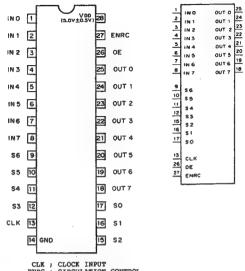
SI-3522V (SANKEN)
POSITIVE VOLTAGE REGULATOR (2A)



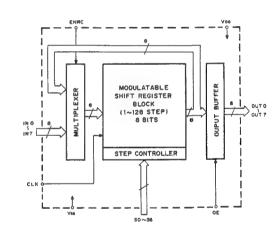


### SM5828P (NPC)

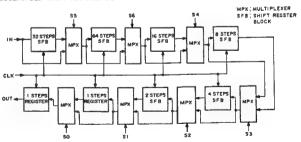
C-MOS 128 STEPS 8 BITS PROGRAMABLE SHIFT REGISTER - TOP VIEW -



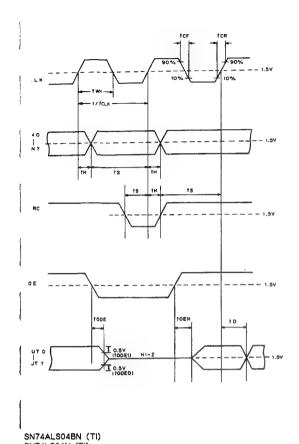
CLK ; CLOCK INPUT ENRC ; CIRCULATION CONTROL INO-INT ; DATA INPUT OE ; OUTPUT ENABLE OUTO-OUT7 ; DATA OUTPUT SO-86 ; REGISTER LENGTH SELECT

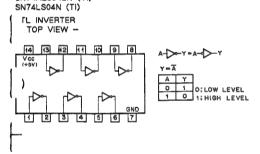




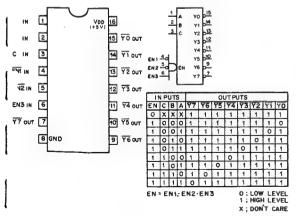






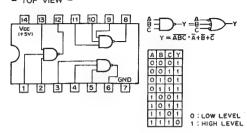






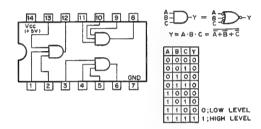
SN74ALS10AN (TI) SN74LS10N (TI)

TTL 3-INPUT POSITIVE NAND GATE - TOP VIEW -



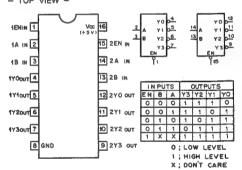
### SN74ALS11AN (TI)

TTL 3-INPUT POSITIVE-AND GATE - TOP VIEW -



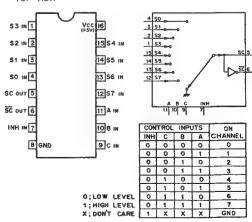
### SN74ALS139NS (TI) FLAT PACKAGE SN74LS139AN (TI)

TTL 2-TO-4-LINE DECODER/DEMULTIPLEXER - TOP VIEW -



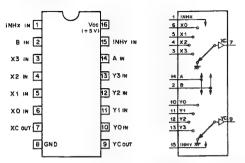
# SN74ALS151N (TI)

TTL 8-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -



### SN74ALS153N (TI)

TTL 4-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER - TOP VIEW -

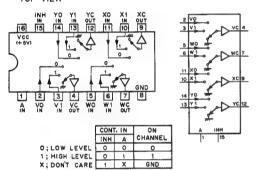


CON	TROL	IN	ON
INH	В	A	CHANNEL
0	0	0	0
0	0	1	1
0	1	0	2
0	- 1	1	3
1	Х	X	GND
0.1	OW	FVF	3

1; HIGH LEVEL X; DON'T CARE

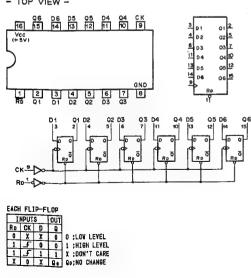
# SN74ALS157AN (Ti)

TTL QUAD 2-LINE-TO-1-LINE DATA SELECTORS/MULTIPLEXERS — TOP VIEW —



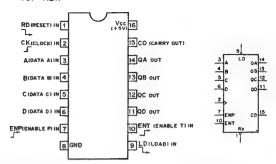
# SN74ALS174N (TI) SN74LS174N (TI)

TTL HEX D-TYPE FLIP-FLOPS WITH DIRECT RESET



### SN74ALS161BN (TI)

TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER – TOP VIEW –



CON	TROL	INP	UTS	MODE
Ro	LD	ENP	ENT	MODE
0	×	×	х	RESET (ASYNCHRONOUS)
1	0	×	x	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	Х	0	NO COUNT
1	1	1		COUNT

O; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE

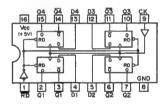


CO IS HIGH WHEN ENT INPUT IS

COUNT SE	OUEN	_		
COUNT			PUTS	
COUNT	۵D	QÇ	QB	QA
0	0	0	0	0
1	0	0	0	- 1
2	0	0	1	0
3	0	0	1	- 1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1_:	0	0	- 1
10	- 1	0	1	0
11	1	0	1.	1
12	1	1_	0	0
13	1	1	0	1.
14	1	1	1	0
1.6		4	4	

SN74ALS175N (TI) SN74LS175N (TI)

TTL D-TYPE FLIP-FLOP WITH CLEAR - TOP VIEW -

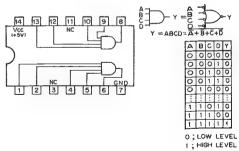


4 01 5 02 12 03 13 04	이 등 이 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등 등
	RO

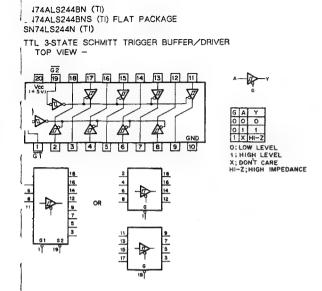
RD	CK	D	Q	ō	
0	Х	Х	0	1	
1	5	1	1	0	O; LOW LEVEL
1	_5	0	0	1	1; HIGH LEVEL
1	0	Х	Qo	Ō٥	X; DON'T CARE

SN74ALS21AN (TI) SN74LS21N (TI)

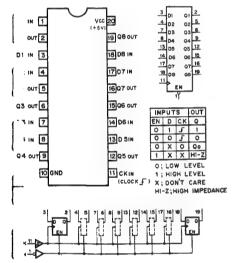
TTL 4-INPUT POSITIVE AND GATE - TOP VIEW -







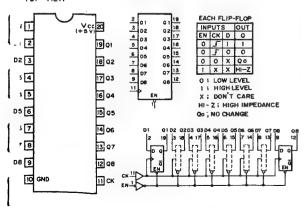
CNI74ALS374AN (TI)
I74LS374N (TI)
L 3-STATE OUTPUTS OCTAL D-TYPE FLIP-FLOP
TOP VIEW —



N74ALS574BNS (TI) FLAT PACKAGE

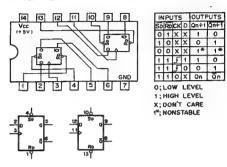
... 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP

- TOP VIEW -

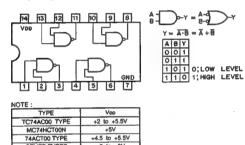


SN74ALS74AN (TI) SN74LS74AN (TI) SN74LS74ANS (TI) FLAT PACKAGE

TTL D-TYPE FLIP FLOP WITH DIRECT SET/RESET - TOP VIEW -

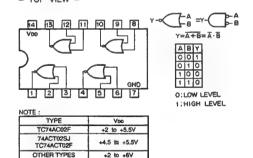


SN74HC00ANS (TI) FLAT PACKAGE C-MOS QUAD 2-INPUT NAND GATES - TOP VIEW -



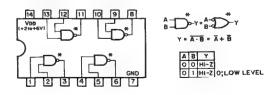
SN74HC02ANS (TI) FLAT PACKAGE C-MOS QUAD 2-INPUT NOR GATES - TOP VIEW --

OTHER TYPES

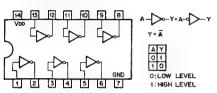


SN74HC03NS (TI) FLAT PACKAGE

C-MOS 2-INPUT POSITIVE-NAND GATE WITH OPEN-DRAIN - TOP VIEW -

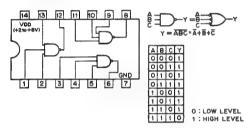


SN74HC04ANS (TI) FLAT PACKAGE C-MOS HEX INVERTERS - TOP VIEW -

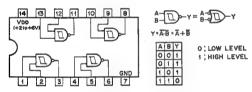


OTE:	
TYPE	Vap
74HCT04 TYPE	+5V
TC74AC04 TYPE	+2 to +5.5V
74ACT04 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

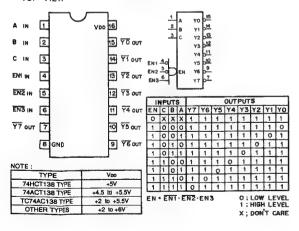
SN74HC10ANS (TI) FLAT PACKAGE C-MOS 3-INPUT NAND GATE - TOP VIEW -



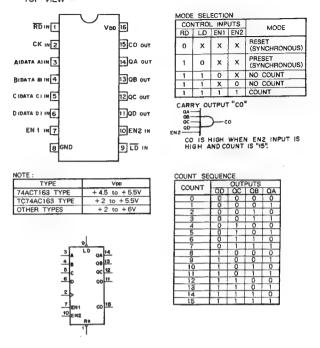
SN74HC132ANS (TI) FLAT PACKAGE
C-MOS 2-INPUT NAND SCHMITT TRIGGER
- TOP VIEW -



SN74HC138ANS (TI) FLAT PACKAGE C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER - TOP VIEW -

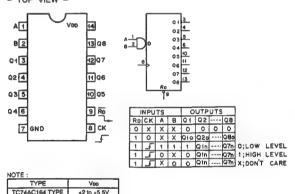


SN74HC163ANS (TI) FLAT PACKAGE
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
- TOP VIEW -

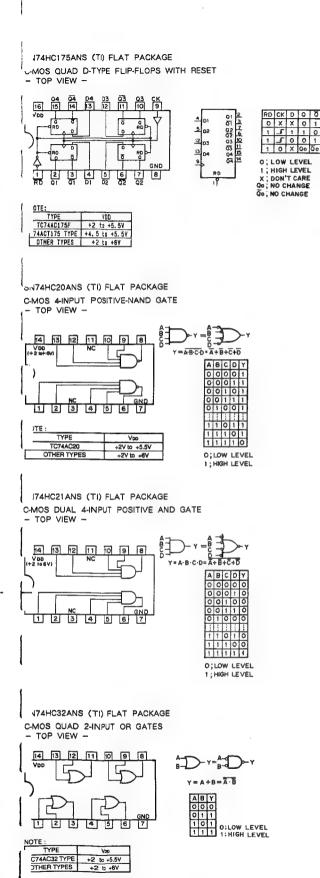


SN74HC164ANS (TI) FLAT PACKAGE

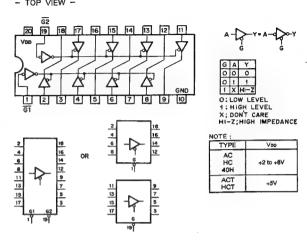
C-MOS 8-BIT SERIAL-IN/PARALLEL-OUT SHIFT REGISTER - TOP VIEW --



OTHER TYPE	S   +	2 to +6V	_					
	Q1	Q2	Q3	Q4	Q5	96	Q7	QB
ск -	3	4	5	6	10	- 11	12	13
	1		7		944		7	-
L	n L	Ro L	Ro L	Ro L	Ro.	RO L	Ro L	Ro
RD €	1		<u> </u>	-		<del></del>		_

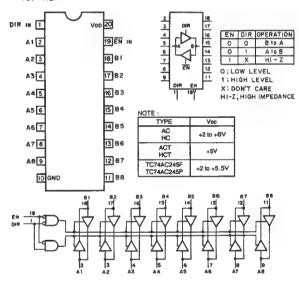


SN74HC244ANS (TI) FLAT PACKAGE C-MOS BUS BUFFER WITH 3-STATE OUTPUTS



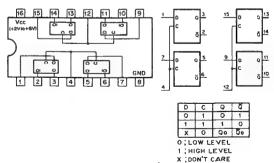
SN74HC245ANS (TI) FLAT PACKAGE

C-MOS BILATERAL BUS TRANSCEIVERS WITH 3-STATE OUTPUTS - TOP VIEW -

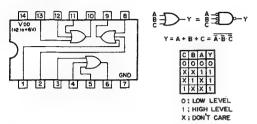


SN74HC375ANS (TI) FLAT PACKAGE

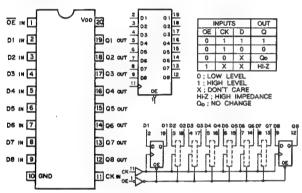
C-MOS 4-BIT BISTABLE LATCHES - TOP VIEW -



### SN74HC4075ANS (TI) FLAT PACKAGE C-MOS 3-INPUT OR GATE - TOP VIEW -



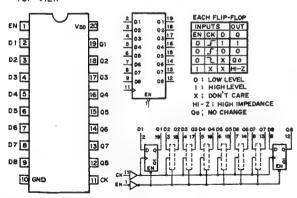
### SN74HC573BNS (TI) FLAT PACKAGE C-MOS 3-STATE OUTPUTS OCTAL LATCHES - TOP VIEW -



NOTE:	
TYPE	Voo
AC	+2 to +6V
HC	+2 IC +0V
ACT	+5V
HCT	+54
TC74AC-573	+2 to +5.5V

### SN74HC574ANS (TI) FLAT PACKAGE SN74HCT574ANS (TI) FLAT PACKAGE

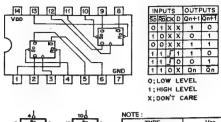
C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP - TOP VIEW -



TYPE	Voo
74AC/74HC	+2 to +6V
74ACT/74HCT	+ 5V
TC74AC574F	+ 2 to + 5.5V

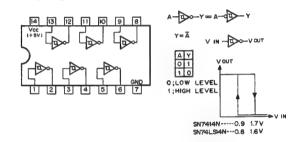
# SN74HC74ANS (TI) FLAT PACKAGE

C-MOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET - TOP VIEW --



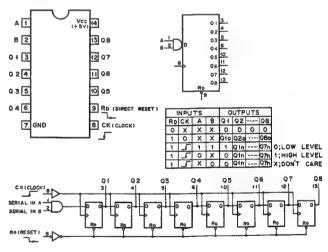
41	104	NOTE:	
2 30 5	12 50 9	TYPE	Voo
31 T	- To of	TC74HCT74AF	+5V
T J.		TC74AC74 TYPE	+2 to +5.5V
m °   -	Ra 9	74ACT74 TYPE	+4.5 to +5.5V
11	13	OTHER TYPES	+2 lb +6V

### SN74LS14NS (TI) FLAT PACKAGE TTL SCHMITT TRIGGER INVERTER - TOP VIEW -



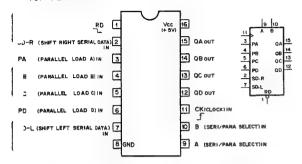
# SN74LS164N (TI)

TTL 8-BIT PARALLEL-OUT SERIAL SHIFT REGISTER - TOP VIEW -





, TL 4-BIT BIDIRECTIONAL UNIVERSAL SHIFT RESISTER TOP VIEW -



-	INPUTS											OUT PUTS					
		MC	DDE	-	SERIAL		PARALLEL LOAD			Q.A	QB	QC.	QD				
	₹D	В	Α	CK	SD-L	SD-R	PA	PB	PC	PD	٧.	40	Q.C	40			
	0	X	X	X	X	×	×	X	X	Χ	0	0	0	0			
Γ	1	X	Х	0	X	×	X	X	X	X	QAo	Q80	QCo	QDo			
ı	1	1	1	5	X	X	A	В	C	D	A	8	С	D	DAD		
,	1	0	4	1	X	1	Х	X	X	Х	1	QAn	QBn		QA-QD		
	1	0	1	_5	X	0	×	X	Х	X	0	QAn	QBn	QCn	9		
	1	1	0	5	1.	X	X	X	Х	X	QBn	QCn	QDn	1	QA-QD		
	1	1	0	1	0	X	X	X	Х	X	QBn	QCn	QDn	0	yme do		
1	1	0	0	X	Х	X	×	X	ųΧ	X	QAO	QB o	QCo	QDo			

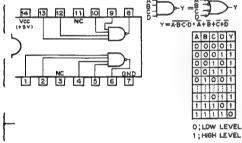
A.B.C.D\* THE LEVEL OF STEADY-STATE INPUT AT PAPER OR PD, RESPECTIVELY.
QAO, QBO, QCO, QDO: THE LEVEL OF QA.QB.QC. OR OO. RESPECTIVELY, BEFORE THE
INDICATED STEADY-STATE INPUT CONDITIONS WERE ESTABLISHED
QAn, QBO, QCO, QDO: THE LEVEL OF QA.DB.C. OR QD RESPECTIVELY, BEFORE MOST
RECENT 1. TRANSITION OF THE CLOCK.

O = LOW LEVEL 1\*HIGH LEVEL X\*DON'T CARE

# N74LS20N (TI)

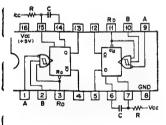
TL 4-INPUT POSITIVE NAND GATE - TOP VIEW -



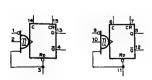


### N74LS221NS (TI) FLAT PACKAGE

.TL MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT – TOP VIEW –



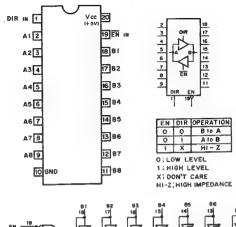
IN	PUT	5	OUT	PUTS	
RD	A	В	9	Q	
0	х	X	0	1	
Х	1	X	0	1	
Х	X	0	0	1	
1	0	+	5	U	O;LOW LEVEL
1	+	1	5	<b>L</b> J	1 HIGH LEVEL
4	0	1	5	T	X;DON'T CARE

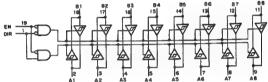


### SN74LS245N (TI)

TTL BILATERAL SCHMITT TRIGGER BUS TRANSCEIVERS WITH 3-STATE OUTPUTS

- TOP VIEW -

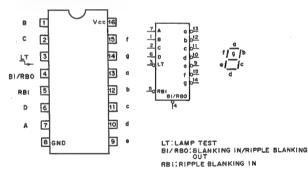




# \$N74LS247NS (TI) FLAT PACKAGE

TTL BCD-TO-SEVEN-SEGMENT DECODER/DRIVER (OPEN COLLECTOR OUTPUT)

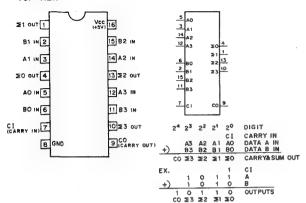
TOP VIEW —



		INPUTS OUTPUTS								OUTPUTS					
LT	RBI	D	С	В	A.	B (/RBO	٩	Ь	C	đ	•	f	g	HEXADECHAL	DECIMAL
1	0	0	٥	0	0	1	0	0	â	0	0	0	1		0
1	×	٥	0	0	1	1	1	0	0	1	1	1	1	1	1
1	X.	0	٥	. 1.	0	1.	٥	0	1	0	0	1	0	2	2
1	X_	0	0	1	1	1	0	0	0	0	1	1	0	3	3
1	X	.0	1	_0_	0	1	1	0	0	1_		٥	0	4	4
1	X	0	1	0	1	1	0	1	0	0	1	0	0	5	5
1	X	0	1	1_	0	1	0	1	0	0_	0	0	0	5	6
1	X	.0	1.1	1	. 1	1	0	0	0	1	1	1	1	7	7
1	X	1	0	0	0	1	0	0	0	0	0	0	0	8	8
1	X	1	0	0	1	1	0	0	٥	0	1	0	0	9	9
1	×	1	0	1	0	1	1	1	1_	0	0	.1	0		10
. 1	×	1	0	1	1	1	1	1	0	0		1	0		11
1	x	1	1	0	Ö	1	1	0	1	1	1	0	0		12
1	x	1	1	0	1	1	0	1	1	0	1	0	0	E	13
1	X	1	1	1	0	1	1	1	1	0	0	0	0	E	1
1	×	1 1	1	1 1	. 1	1	1	1	1	1	1	1	1	BLANK	15
Х	X	X	X	X	Х	0	1	1	1	1	1	1	1	BLANK	15
1	0	0	0	0	0	o*	1	- 1	1	1	1	1	1 1	BLANK	15
0	X	Х	Х	Х	х	1	٥	0	0	0	0	0	0	В	8
1	1 1	0	0	0	0	1 1	1 1	1	1	1	1 1	1	1	BLANK	15

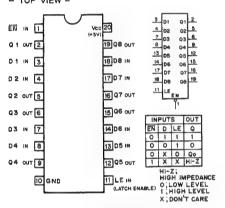
<sup>\*</sup> When RBI and inputs A,B,C, and D are at a low "0" level with the LT input high"H", all segment outputs go off (") and the RBO goes to a low "0" level (response condition).

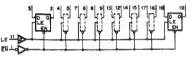
SN74LS283NS (TI) FLAT PACKAGE TTL 4-BIT BINARY FULL ADDER -- TOP VIEW -



SN74LS373N (TI)

TTL 3-STATE OUTPUTS OCTAL LATCHES - TOP VIEW -



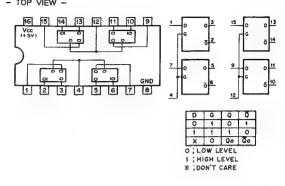


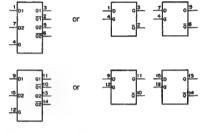
TA7805S (TOSHIBA) + 5V POSITIVE VOLTAGE REGULATOR (0.5A) - SIDE VIEW -





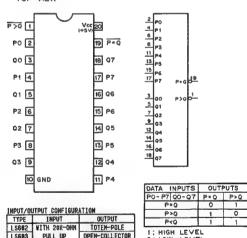
SN74LS375N (TI) TTL BISTABLE LATCH - TOP VIEW -





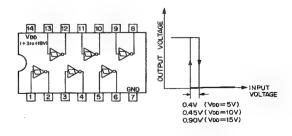
SN74LS684N (TI)

TTL 8-BIT MAGNITUDE COMPARATOR WITH TOTEM-POLE OUTPUTS - TOP VIEW -



OUTPUT
TOTEM-POLE
OPEN-COLLECTOR
TOTEM-POLE

TC4584BF (TOSHIBA) FLAT PACKAGE C-MOS SCHMITT TRIGGER INVERTER - TOP VIEW -



:4S66F (TOSHIBA)

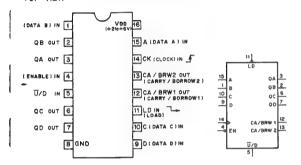
C-MOS BILATERAL ANALOG SWITCH - TOP VIEW --



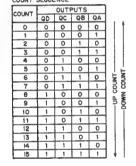


:74HC191AF (TOSHIBA) FLAT PACKAGE

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER - TOP VIEW -



CON	TROL I	NPUTS	MODE
LD	EN	Ū/D	MODE
0	×	×	PRESET (ASYNCHRONOUS)
1	1	×	NO COUNT
1	0	0	UP COUNT
1	0	1	DOWN COUNT



COUNT SEQUENCE

D; LOW LEVEL 1; HIGH LEVEL X; DON'T CARE.

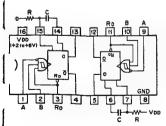
CA/BRW1 OUTPUT IS HIGH WHEN COUNT IS "15" AT UP-COUNT OR WHEN COUNT IS "O" AT DOWN COUNT.

CA/8RW1

 $\ensuremath{\mathsf{I/BRW2}}$  output is low when both the clock and en inputs are w and ca/brw1 output is high.

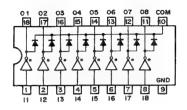
# :74HC221AF (TOSHIBA) FLAT PACKAGE

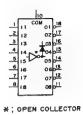
C-MOS MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT - TOP VIEW -

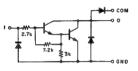


IN	PUT	S	OUTI	PUTS	
Rρ	Α	В	Q	ō	
0	х	X	0	1	
х	1	X	0	1	
х	x	0	0	1	
1	0	†			O;LOW LEVEL
1	+	1	J	U	1; HIGH LEVEL
†	0	1	5	U	X; DON'T CARE

TD62083AP (TOSHIBA) DARLINGTON DRIVER

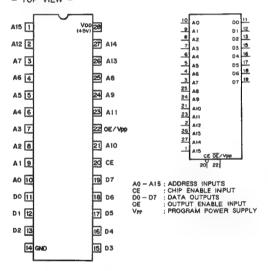






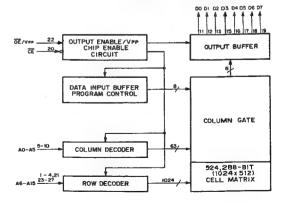
TMS27C512-20JL (TI)

C-MOS 512K (65,536x8 = 524,288)-BIT ERASABLE PROM - TOP VIEW -



An	CE	OE /Vrr	Vpp	Dn	FUNCTION
Apr	0	0	+5V	Dour	READ
An	0	1	+5V	HI-Z	OUTPUT DISABLE
Х	1	Х	+5V	HI-Z	STANDBY
An	0	+12.5V	+6V	DIN	PGM
Am	0	0	+6٧	Dout	PGM VERIFY
Х	1	+12.5V	+67	HI-Z	PGM INH

0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE
HI-Z : HIGH IMPEDANCE

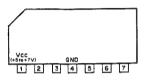




TL082CPS (TI) FLAT PACKAGE OPERATIONAL AMPLIFIER (JFET INPUT) - TOP VIEW



UPC1037HA (NEC) DOUBLE-BALANCED MODULATOR - SIDE VIEW -

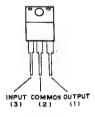




UPC311G2 (NEC) FLAT PACKAGE VOLTAGE COMPARATOR - TOP VIEW -



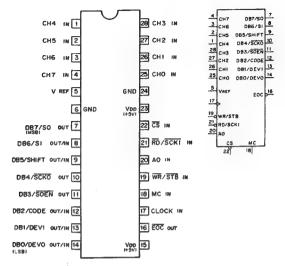
XRA17809T (EXAR) +9V POSITIVE VOLTAGE REGULATOR - FRONT VIEW -





UPD7004C (NEC)

C-MOS 10-BIT SUCCESSIVE COMPARATOR TYPE A/D CONVERTER - TOP VIEW -



AO ; CONTROL ADDRESS INPUT CHO~7; ANALOG INPUT CODE ; CODE SELECT (2'S COMPLEMENT/ BINARY) INPUT

CS ; CHIP SELECT INPUT
DBO~7; DATA BUS INPUT/OUTPUT
DEVO,
DEVI; CLOCK RATE SELECT INPUT

; MODE SELECT INPUT ; READ SIGNAL INPUT

SERIAL CLOCK INPUT SERIAL CLOCK OUTPUT SHIFT SELECT (LSB FIRST/ MSB FIRST) SCKI SHIFT

MSB FIRST;
SERIAL INPUT
SERIAL OUTPUT
SERIAL OUTPUT ENABLE OUTPUT
ADDRESS WRITE STROBE SIGNAL STA

INPUT WRITE SIGNAL INPUT

MC 31 RD/SCKI 4C WR/STB 4C CS 4C DB 7/SO DB 6/SI DB 5/SHIFT DB 4/SCKO DB 3/SOEN DB 2/CODE DB 1/DEV1 REGISTER cs 3-STATE BUFFER STATUS ADDRESS LATCH PROGRAMABLE DIVIDER DBO/DEVO MULTI -PLEXER

MC	MODE
0	SERIAL
1	PARALLEL

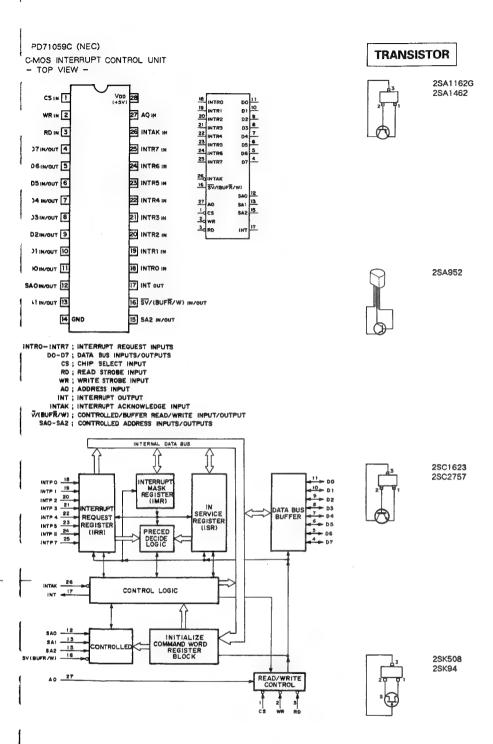
<u>čš</u>	WR	RD	AQ	MODE
1	х	Х	Х	HIGH IMPEDANCE
0	1	1	X	HIGH IMPEDANCE
0	0	1	0	#1 ANALOG CHANNEL SELECT
0	٥	1	1	#2 CODE SELECT/ #3 CLOCK RATE SELECT
0	1	0	٥	#4 LOW-BYTE DATA OUTPUT
0	1	0	1	#4 HIGH-BYTE DATA OUTPUT
0	0	0	X	INHIBIT

0;	LOW	LEVEL	х:	DON'T	CARE
1,	HIGH	LEVEL			

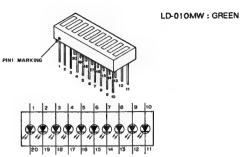
	#1 ANALOG CHANNEL							
ì	SEL2	SEL 1	SELO	MPX CHAN.				
1	0	0	0	CHO				
١	0	0	1	CHI				
1	0 1		0	CH2				
			1	CH3				
	1	0	0	CH4				
1	1	0	1	CH5				
	1	1	0	CH6				
	1	1	1	CH7				

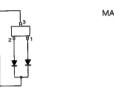
#2 C	DDE SELECT	#3 CLOCK RATE SELECT				
CODE	CODE SELECT	DEV1	DEV 0	CLOCK RATE		
0	BINARY DATA	0	0	1		
1	2'S COMPLEMENT DATA	0	1	1/2		
		1	0	1/4		
		1	1	1/8		
	_	•				

#4 LOW/HIGH-BYTE DATA								
D87	DB 6	085	DB4	D83	DB2	DB 1	DB 0	
MSB	2ND	3RD	4TH	5TH	БТН	7TH	втн	
9ТН	0	0	0	0	0	0	D	
	DB7 MSB	D87 D86	D87 D86 D85 MS8 2ND 3RD	D87 D86 D85 D84 MSB 2ND 3RD 4TH	DB7 DB6 DB5 DB4 DB3 MSB 2ND 3RD 4TH 5TH	D87 D86 D85 D84 D83 D82 MS8 2ND 3RD 4TH 5TH 6TH	DB7 DB6 DB5 DB4 DB3 DB2 DB1 MSB 2ND 3RD 4TH 5TH 6TH 7TH	









MA152WK





TLR214; RED



TLY123; YELLOW

# SECTION 8 SPARE PARTS

## 8-1. NOTES ON SPARE PARTS

## (1) Safety Related Coponents Warning

Components marked with  $\Lambda$  on the schematic diagrams, exploded views and electrical spare parts list are critical to safe operation.

Replace these components with Sony parts whose part numbers appear in this manual or in service bulletins and service manual supplements published by Sony.

## (2) Standardization of Parts

Spare parts supplied from Sony Parts Center may not always be identical with the parts actually in use due to accommodating the improved parts and/or engineering changes or standardization of genuine parts.

This manual's exploded views and electrical spare parts list indicate the part numbers of the standardized genuine parts at present.

#### (3) Stock of Part

Parts marked with "o" in the SP(Supply code)column of the spare parts list are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional time for delivery.

## (4) Units for Capacitors, Inductors and resistors

The following units may be assumed in schmatic diagrams, electrical parts list and exploded views unless otherwise specified.

Capacitor: µ F

Inductor: µH

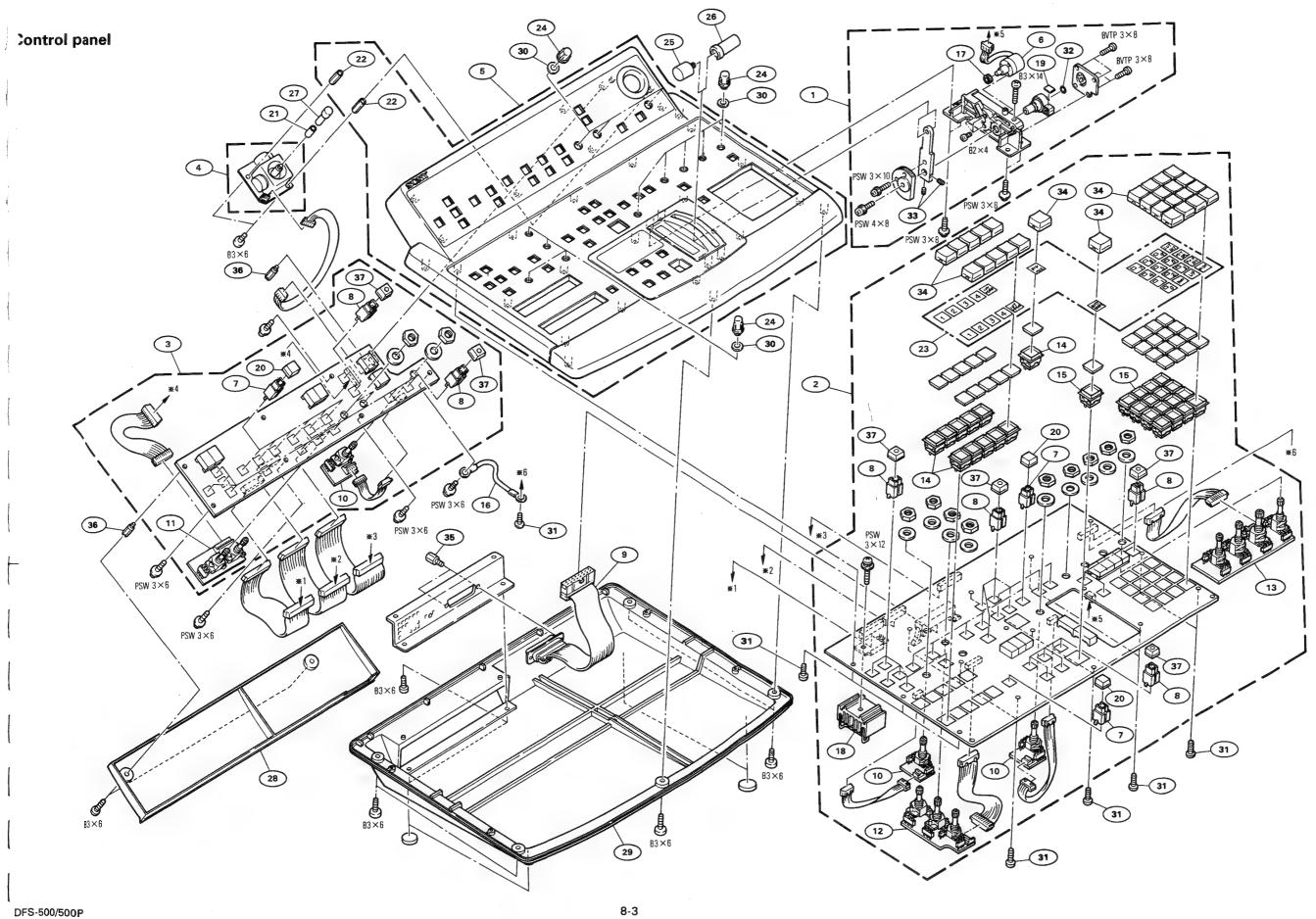
 $\text{Resistor} : \Omega$ 

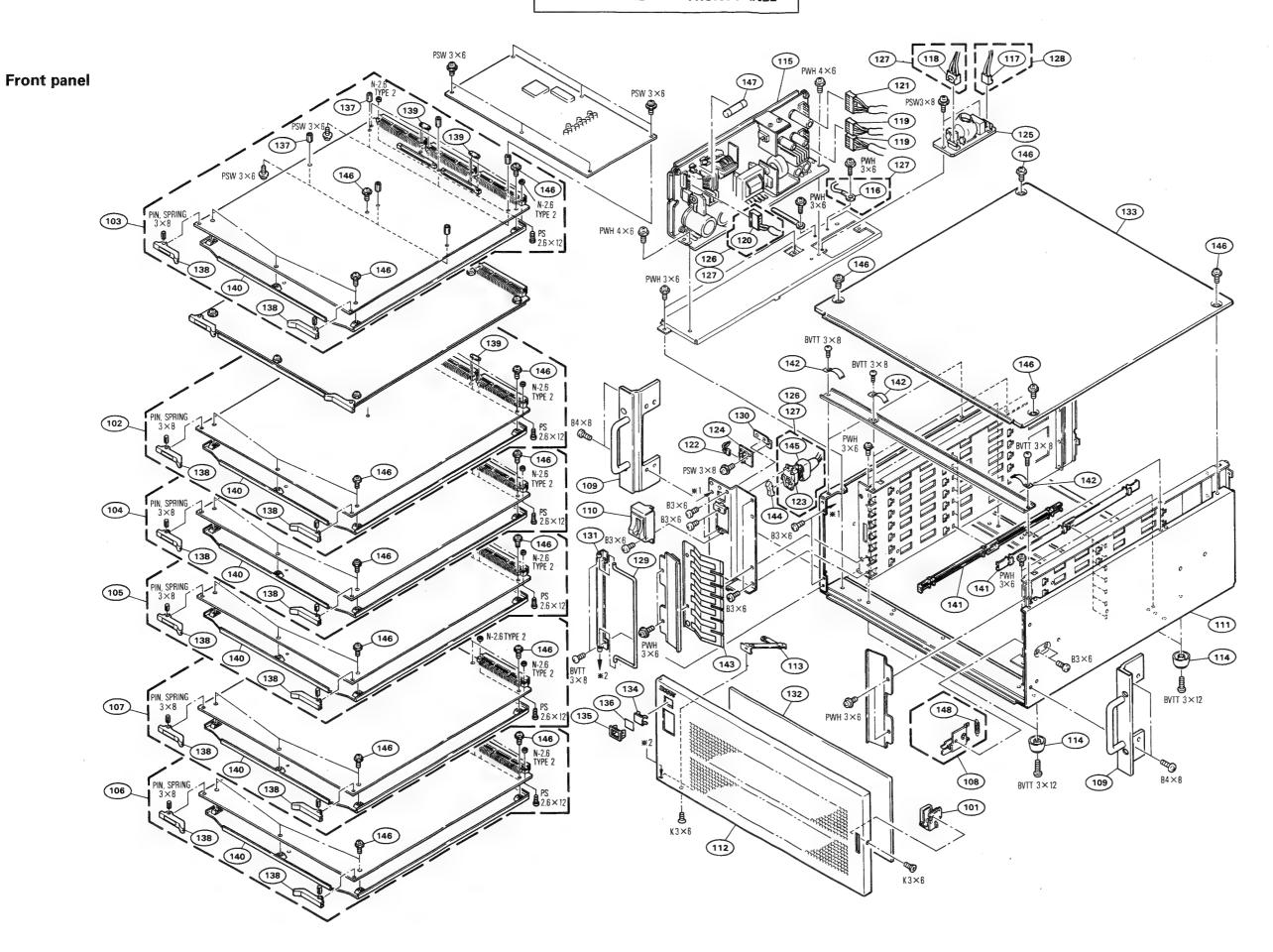
#### 8-2. EXPLODED VIEW AND LIST

CONTROL PANEL, DFS-500/500P

```
SP Description
No.
                    Part No.
                     A-8262-836-A o FADER ASSY
                    A-8202-830-A O FADER ASSI
A-8271-686-A O MOUNTED CIRCUIT BOARD, KY-223
A-8271-687-A O MOUNTED CIRCUIT BOARD, KY-225
A-8271-688-A O MOUNTED CIRCUIT BOARD, KY-226
X-3166-840-1 O PANEL ASSY, UPPER
   45
                    1-466-182-11 s ENCODER, ROTARY (MAGNETIC)
1-571-653-21 s SWITCH, TACTIL
1-571-654-21 s SWITCH, TACTIL
1-574-992-11 s WIRE ASSY, FLAT TYPE(25 CORE)
1-644-610-11 o PRINTED CIRCUIT BOARD, VR-135
10
                    1-644-611-11 o PRINTED CIRCUIT BAORD, VR-136
1-644-612-11 o PRINTED CIRCUIT BOARD, VR-137
1-644-613-11 o PRINTED CIRCUIT BOARD, VR-138
1-692-347-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
 12
 13
 15
                     1-951-147-11 O HARNESS (KY-4)
2-139-100-01 S GEAR (C)
2-139-131-01 O HEAT SINK, CON
2-139-171-01 S SPACER (F)
2-140-311-04 S KEY TOP
 16
17
 18
 19
  20
                     3-166-428-01 s COVER, JOG
3-168-210-01 o SPACER (A)
3-177-559-01 o CHIP (A), SW
3-178-147-02 s KNOB, VOLUME
3-178-149-01 o GRIP (A)
  22
  23
  25
                     3-178-150-01 o GRIP (B)
3-178-151-01 s LEVER, JOG
3-178-173-01 o PANEL, REAR
3-178-178-01 o PANEL, LOWER
3-179-652-01 s WASHER
  27
  28
  29
  30
                      3-678-079-01 s SCREW, +BVWH 3X8
3-701-443-21 s WASHER, POLY 5mm DIA., 0.5T
3-701-508-00 s SET SCREW, DOUBLE POINT 3X6
3-708-563-01 o CAP
  32
  34
                      3-711-228-21 O STANDOFF, D SUB CONN.
  35
                      3-897-313-01 s BOSS (17.2), RELAY 4-928-315-01 s KEY TOP
  36
```







```
FRONT PANEL, DFS-500/500P
```

```
SP Description
                       Part No.
No.
                      A-8262-832-A O HANDLE ASSY, DOOR
A-8271-679-A O MOUNTED CIRCUIT BOARD, MY-54
A-8271-680-A O MOUNTED CIRCUIT BOARD, DA-63 (FOR J, UC)
A-8271-692-A O MOUNTED CIRCUIT BOARD, DA-63P (FOR EK)
A-8271-683-A D MOUNTED CIRCUIT BOARD, PU-78
A-8271-684-A O MOUNTED CIRCUIT BOARD, FM-29 (FOR J, UC)
A-8271-693-A D MOUNTED CIRCUIT BOARD, FM-29P (FOR EK)
 101
 102
 103
 104
 105
                       A-8271-685-A O MOUNTED CIRCUIT BOARD, AD-76 (For J, UC) A-8271-697-A O MOUNTED CIRCUIT BOARD, AD-76P (For EK) A-8271-694-A O MOUNTED CIRCUIT BOARD, SY-172 (For J) A-8271-695-A O MOUNTED CIRCUIT BOARD, SY-172 (For UC) A-8271-695-A O MOUNTED CIRCUIT BOARD, SY-172P (For EK) Y-2127-216-1 O LOCK ASSY DOOP
 106
 107
                        X-2127-216-1 0 LOCK ASSY, DOOR
X-2127-223-2 0 ANGLE ASSY (4U), RACK
X-2127-224-1 s BRACKET ASSY, SW
  109
  110
                        K-2127-225-3 o CHASSIS (4U) ASSY
K-3166-837-1 o PANEL ASSY, FRONT (For J, UC)
K-3166-876-1 o PANEL ASSY, FRONT (For EK)
K-3166-838-1 o STOPPER ASSY
                  X-3566-109-0 s FOOT ASSY, MF
A1-413-776-11 s SWITCHING REGULATOR (SSOG1213) (For J, UC)
A1-413-776-21 s SWITCHING REGULATOR (SSOG1213KA) (For EK)
   114
                  1-535-340-11 0 TERMINAL, SOLDERLESS

$\Lambda 1-562-211-11 0 HOUSING, CONNECTOR 3P (For EK)
$\Lambda 1-562-210-11 0 CONNECTOR, CONTACT
$\Lambda 1-562-286-11 0 HOUSING, CONNECTOR 5P (For EK)
$\Lambda 1-562-210-11 0 CONNECTOR, CONTACT
$1-562-819-11 0 HOUSING, CONNECTOR 4P
$\Lambda 1-560-764-21 0 TERMINAL, SOLDERLESS
$\Lambda 1-562-820-11 0 HOUSING, CONNECTOR 5P
$\Lambda 1-560-764-21 0 TERMINAL, SOLDERLESS
   117
   118
   119
                  1-562-821-11 O HOUSING, CONNECTOR 6P

1-560-764-21 O TERMINAL, SOLDERLESS
1-569-196-31 O HOUSING, CONNECTOR 3P
1-569-193-11 O TERMINAL, SOLDERLESS
1-570-117-41 S SWITCH, SEESAW (AC POWER)
1-620-338-11 O PC BOARD, LE-55
1-636-387-12 D PC BOARD, AC-111 (FOR EK)
    121
    122
    123
    124
   2-139-127-01 s HINGE (4U)
     131
                           2-139-136-03 s FILTER (40)
2-139-153-01 o PLATE (D450), TOP
2-139-192-01 o FRAME, INDICATOR WINDOW
2-139-193-01 o WINDOW, INDICATOR
     132
     133
                            2-249-353-00 o COVER, LAMP
2-280-622-21 o SUPPORT (M3X10), HEXAGON
3-166-184-01 o LEVER, PC BOARD
3-166-185-01 s NUT, PLATE
3-178-157-01 o PLATE, SHIELD
     137
     138
      139
      140
                           3-178-164-01 o RAIL (290), PC BOARD GUIDE
3-178-672-01 o FINGER, SHIELD
3-179-322-01 o SPRING (L), GROUND
3-688-814-01 s CAP, SWITCH
4-378-341-01 o COVER, SWITCH
      141
      142
      143
      144
                     4-886-821-11 s SCREW, M3 CASE

A9-903-804-01 s FUSE GGL10 250V10A (For J, UC)

A9-903-806-01 s FUSE S506-6.3A COLOR (For EK)
      148
                            9-910-999-31 s SPRING, TENSION
```

#### REAR PANEL, DFS-500/500P

```
SP Description
                        Part No.
No.
                       A-8271-678-A O MOUNTED CIRCUIT BOARD, MB-385
A-8271-681-A O MOUNTED CIRCUIT BOARD, CN-573
 202
                       X-2068-004-0 s TERMINAL ASSY
1-535-316-11 s TERMINAL, GROUND (M4)
1-541-329-31 s FAN, DC (WITH ALARM)
 203
 204
 205
                 1-562-285-11 o HOUSING, CONNECTOR 4P

A1-562-210-11 o CONNECTOR, CONTACT

A1-562-286-11 o HOUSING, CONNECTOR 5P

A1-562-210-11 o CONNECTOR, CONTACT

1-563-337-11 s HOUSING, CONNECTOR (DIP) 96P

1-568-676-11 o CONNECTOR, D-SUB 9P

1-568-677-11 o CONNECTOR, D-SUB 25P
 206
 207
 208
 209
                       1-569-196-11 o HOUSING, CONNECTOR 3P
1-569-193-11 o TERMINAL, SOLDERLESS
1-570-157-51 s SWITCH, SLIDE
1-573-580-11 s CONNECTOR, BNC (RECEPTACLE)
1-573-589-11 s CONNECTOR (R-M) 12P
1-573-590-12 s CONNECTOR, (S) TERMINAL 4P
 211
  213
                 1-573-592-11 s CONNECTOR (R-F) 12P

↑1-580-375-11 s INLET 3P

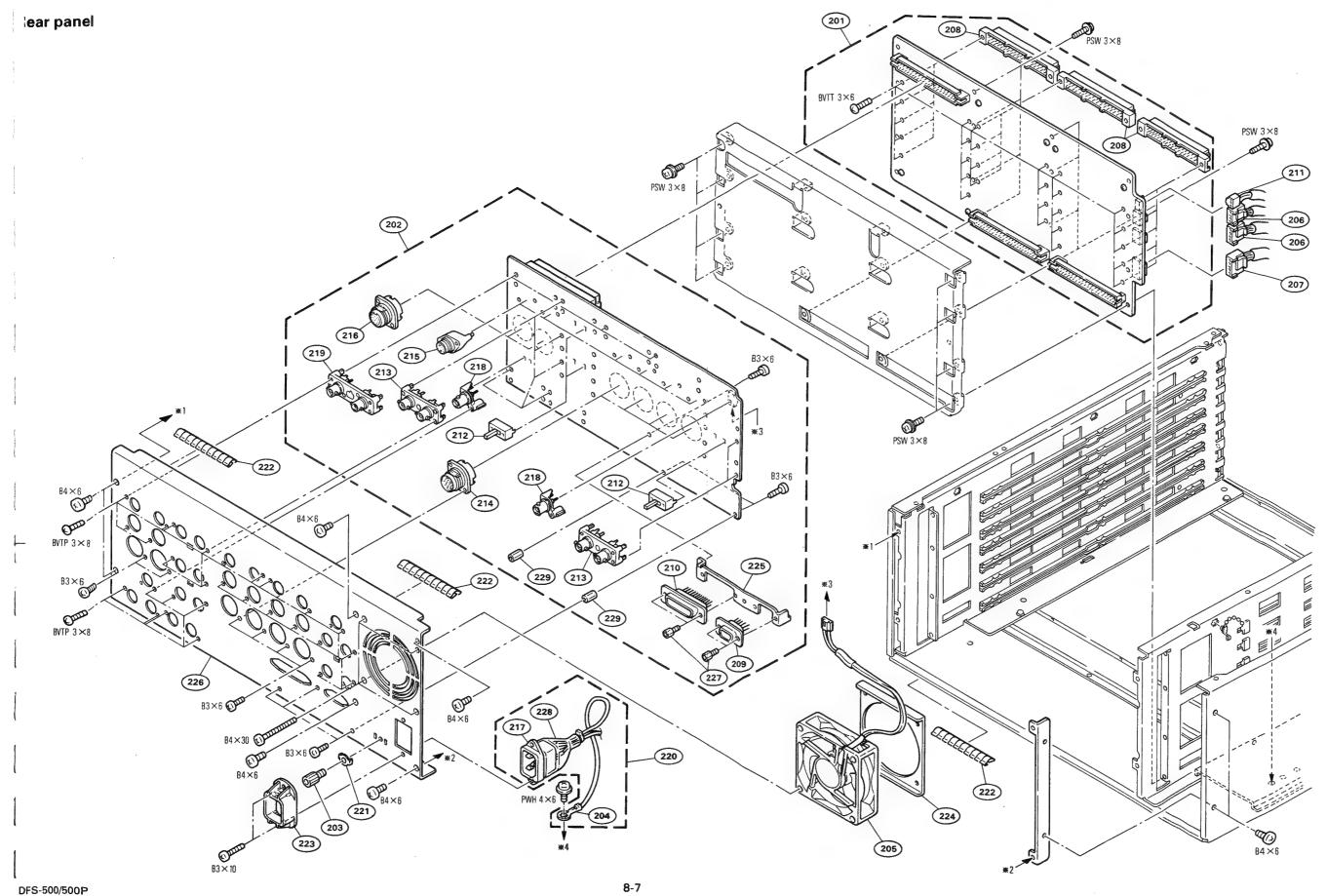
1-691-274-11 s CONNECTOR ASSY (BNC) 1P

1-695-807-11 s CONNECOTR, BNC (RECEPTACLE)

↑1-950-804-11 o HARNESS (ACW-500) (For J, UC)

↑1-950-975-11 o HARNESS (ACW-500PA) (For EK)
  217
218
                         2-068-008-00 s WASHER
2-139-222-01 o SPRING
2-990-241-02 s HOLDER (A), PLUG
3-178-136-01 o BRACKET, FAN
3-178-137-01 o BRACKET, D-SUB
   222
   223
   224
                        3-178-161-01 o PANEL, REAR
3-673-910-21 o SCREW, CONNECTOR
4-601-466-11 o COVER, 3P INLET
4-876-607-21 o COLLAR (E), PLATE, JACK
   227
   228
```





# 8-3. ELECTRICAL PARTS LIST

CAPACITOR (CERAMIC)

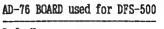
Part No. SP Description

1-163-097-00 s CERAMIC, CHIP 15pF 5% 50V 1-163-038-00 s CERAMIC, CHIP 0.1 50V

# RESISTOR (METAL)

Part No.	SP Descri	ption			
1-216-624-11 1-216-627-11 1-216-631-11 1-216-651-11 1-216-659-11	S METAL, S METAL, S METAL,	CHIP CHIP CHIP	100 150 1.0k	1% 1% 1%	1/10W 1/10W 1/10W 1/10W 1/10W
1-216-667-11 1-216-675-11 1-216-699-11	s METAL	CHIP	10k	1%	1/10W 1/10W 1/10W

AC-111 BOARD used for DFS-500P		
Ref. No	Part No. SP Description	
1pc	1-636-387-12 o PRINTED CIRCUIT BOARD, AC-111	
C1 C2 C3 C4	↑1-136-185-00 s FILM 0.22uF 20% 250V ↑1-137-106-11 s FILM 0.022uF 20% 25V ↑1-162-573-11 s CERANIC 100PF 10% 400V ↑1-162-573-11 s CERANIC 100PF 10% 400V	
CN1 CN2	↑1-564-321-00 o CONNECTOR, VH 2P, MALE ↑1-564-687-11 o CONNECTOR, VH 3P, MALE	
L1	1-421-944-11 s TRANSFORMER, LINE FILTER	
R1	<b>1-214-937-00 s METAL 1M 1% 1/2W</b>	



Ref. No. or Q'ty	Part No. SP Description
	A-8271-685-A o MOUNTED CIRCUIT BOARD, AD-76 3-166-184-01 n LEVER, PC BOARD 3-166-185-01 s NUT, PLATE 3-178-157-01 o PLATE, SHIELD 4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6
2pcs	7-622-207-05 s N 2.6, TYPE 2
2pcs	7-626-320-11 s PIN, SPRING 3X8
6pcs	7-628-254-40 s SCREW +PS 2.6X12
C1	1-126-934-11 s ELECT 220uF 20% 16V
C2	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C3	1-126-934-11 s ELECT 220uF 20% 16V
C4	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C5	1-126-934-11 s ELECT 220uF 20% 16V
C6 C7 C8 C9 C10	
C11 C12 C13 C14 C15	
C16	1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C17	1-126-934-11 s ELECT 220uF 20% 16V
C18	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C19	1-126-934-11 s ELECT 220uF 20% 16V
C20	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C21	1-126-934-11 s ELECT 220uF 20% 16V
C22	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C23	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C24	1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C25	1-126-925-11 s ELECT 470uF 20% 10V
C26	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C27	1-126-925-11 s ELECT 470uF 20% 10V
C28	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C31	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C36	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C37	1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C39	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C41	1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
C101	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C102	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C103	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C104	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C105	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C106	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C107	1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C109	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C110	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C111	1-162-638-11 s CERAMIC, CHIP 1uF 16V
C112	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C113	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C114	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C115	1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C117	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C118	1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C119	1-162-638-11 s CERAMIC, CHIP 1uF 16V



```
(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
                                                                                                                                                                                                                             Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No. SP Description
                                                                                                                                                                                                                                                                                                     SP Description
                              1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                            1-126-396-11 s ELECT, CHIP 47UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
                                                                                                                                                                                                                             C241
 C121
                                                                                                                                                                                                                              C242
 C122
                                                                                                                                                                                                                              C243
 C123
                                                                                                                                                                                                                             C244
 C125
                                1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                            1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
 C126
                                                                                                                                                                                                                              C246
 C127
                                                                                                                                                                                                                              C247
 C128
                                                                                                                                                                                                                              C301
 C129
                                                                                                                                                                                                                              C302
 C130
                                                                                                                                                                                                                                                             1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                               C305
                                                                                                                                                                                                                               C306
 C133
C134
C135
                                                                                                                                                                                                                               C307
                                                                                                                                                                                                                               C309
                                                                                                                                                                                                                              C310
   C136
                                                                                                                                                                                                                                                             1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                               C311
                                                                                                                                                                                                                               C312
   C138
                                                                                                                                                                                                                               C313
   C139
                                                                                                                                                                                                                               C318
   C141
                                                                                                                                                                                                                               C319
   C142
                                                                                                                                                                                                                                                              1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-163-224-11 s CERAMIC 7PF 0.25PF 50V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                 1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-396-11 s ELECT, CHIP 47UF 20% 16V
                                                                                                                                                                                                                               C321
                                                                                                                                                                                                                               C332
C341
C342
   C144
   C145
   C146
                                                                                                                                                                                                                               C343
   C147
                                                                                                                                                                                                                                                              1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V
                                  1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                               C344
   C201
                                                                                                                                                                                                                               C347
C352
   C202
   C203
C204
                                                                                                                                                                                                                               C353
                                                                                                                                                                                                                                C355
    C205
                                  1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                                                                              1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-035-00 s CERAMIC, CHIP 0.047uF 50V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
    C206
                                                                                                                                                                                                                               C361
   C207
C209
                                                                                                                                                                                                                               C363
C366
    C210
                                                                                                                                                                                                                               C367
    C211
                                   1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                              1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                                                                                               C370
    C212
                                                                                                                                                                                                                               C371
    C213
                                                                                                                                                                                                                               C382
    C214
C215
                                                                                                                                                                                                                               C383
                                                                                                                                                                                                                                C385
     C217
                                    1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                                              1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
                                                                                                                                                                                                                                C386
     C218
                                                                                                                                                                                                                                C387
    C219
C220
C221
                                                                                                                                                                                                                               C388
C401
                                                                                                                                                                                                                                C402
     C222
                                                                                                                                                                                                                                                              1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                    1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                C405
                                                                                                                                                                                                                                C406
    C225
C226
C227
                                                                                                                                                                                                                                C407
                                                                                                                                                                                                                                C409
                                                                                                                                                                                                                                C410
     C228
                                                                                                                                                                                                                                                              1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                    1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                                                C411
    C229
C230
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    C231
C233
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     C234
                                                                                                                                                                                                                                                             1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                     1-162-638-11 s CERAMIC, CHIP 1UF 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
1-126-394-11 s ELECT, CHIP 10UF 20% 16V
                                                                                                                                                                                                                                C421
    C236
C237
                                                                                                                                                                                                                               C432
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(AD-76 BOARD used for DFS-500)	•
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
C443 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C444 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C447 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C452 1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V C453 1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V	C593 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C594 1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V C595 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C601 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C602 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C455 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C459 1-164-232-11 S CERAMIC 0.01uF 10% 100V C461 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C463 1-163-035-00 S CERAMIC, CHIP 0.047uF 50V C466 1-162-638-11 S CERAMIC, CHIP 1uF 16V	C607 1-162-638-11 s CERAMIC, CHIP 1uF 16V C608 1-162-638-11 s CERAMIC, CHIP 1uF 16V C610 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C621 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C625 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C467 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C470 1-164-232-11 S CERAMIC 0.01uF 10% 100V C471 1-164-232-11 S CERAMIC 0.01uF 10% 100V C482 1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V C483 1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V	C626 1-164-005-11 s CERAMIC, CHIP 0.47uF 25V C627 1-162-638-11 s CERAMIC, CHIP 1uF 16V C628 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C629 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C630 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C485 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C486 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C487 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C488 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C501 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C631 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C634 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C636 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C637 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C639 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C502 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C507 1-162-638-11 s CERAMIC, CHIP 1uF 16V C508 1-162-638-11 s CERAMIC, CHIP 1uF 16V C510 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C521 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V	C640 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C641 1-164-232-11 s CERAMIC 0.01uF 10% 100V C642 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C643 1-163-229-11 s CERAMIC, CHIP 12PF 5% 50V C644 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C525 1-162-638-11 s CERAMIC, CHIP 1uF 16V C526 1-164-005-11 s CERAMIC, CHIP 0.47uF 25V C527 1-162-638-11 s CERAMIC, CHIP 1uF 16V C528 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C529 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V	C645 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C646 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C647 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C648 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C660 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
C530 1-162-638-11 s CERAMIC, CHIP 1uF 16V C531 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C534 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C536 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C537 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V	C662 1-164-232-11 s CERAMIC 0.01uF 10% 100V C663 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C665 1-164-232-11 s CERAMIC 0.01uF 10% 100V C666 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C672 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V
C539 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C540 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C541 1-164-232-11 s CERAMIC 0.01uF 10% 100V C542 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C543 1-163-229-11 s CERAMIC, CHIP 12PF 5% 50V	C676 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V C685 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C686 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C687 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C688 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
C544 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C545 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C546 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C547 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C548 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C689 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C690 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C692 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C693 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C694 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
C560 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C562 1-164-232-11 s CERAMIC 0.01uF 10% 100V C563 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C565 1-164-232-11 s CERAMIC 0.01uF 10% 100V C566 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V	C695 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C701 1-162-638-11 S CERAMIC, CHIP 1uF 16V C702 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C703 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C704 1-163-087-00 S CERAMIC, CHIP 4PF 50V
C572 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V C576 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V C585 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C586 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C587 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V	C720 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C740 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C751 1-104-601-21 s ELECT 10uF 20% 10V C752 1-104-601-21 s ELECT 10uF 20% 10V C753 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C588 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C589 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C590 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C592 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C756 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C757 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C759 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C760 1-162-638-11 s CERAMIC, CHIP 1uF 16V



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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No. SP Description
                                                                                                                                                                                                                                                                    SP Description
                                                                                                                                                                                                                                 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                            1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V
                                                                                                                                                                                                     C911
C763
                                                                                                                                                                                                    C915
C764
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C765
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C766
                                                                                                                                                                                                     C919
                                                                                                                                                                                                                                 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                            1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                     C922
                                                                                                                                                                                                     C923
C771
C773
                                                                                                                                                                                                     C927
                                                                                                                                                                                                     C930
 C774
                                                                                                                                                                                                                                 1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
                             1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                    C944
 C778
                                                                                                                                                                                                     C945
 Č779
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  C786
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  C787
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                                                                                                                                                                                                                                 1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                             1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                      C954
  C791
                                                                                                                                                                                                     C955
  C793
  C794
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                                                                                                                                                                                                      C957
  C797
                                                                                                                                                                                                     C958
  C798
                                                                                                                                                                                                                                 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V

1-163-224-11 s CERAMIC 7PF 0.25PF 50V

1-164-232-11 s CERAMIC 0.01uF 10% 100V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                              1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
  C799
                                                                                                                                                                                                      C962
  C801
                                                                                                                                                                                                      C963
  C802
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  C803
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   C804
                              1-163-235-11 s CERANIC, CHIP 22PF 5% 50V

1-163-235-11 s CERANIC, CHIP 22PF 5% 50V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                                                  1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V
                                                                                                                                                                                                      C1001
   C820
                                                                                                                                                                                                      C1002
  C840
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   C851
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   C852
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   C853
                                                                                                                                                                                                                                 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
                               1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                       C1015
   C856
                                                                                                                                                                                                      C1016
   C857
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   C859
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   C860
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   C863
                                                                                                                                                                                                                                 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
                                1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                       C1023
   C864
                                                                                                                                                                                                      C1027
   C865
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   C866
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   C867
                                                                                                                                                                                                      C1044
   C870
                                                                                                                                                                                                                                  1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                      C1045
                                                                                                                                                                                                       C1046
   C873
                                                                                                                                                                                                       C1052
   C874
                                                                                                                                                                                                       C1053
   C877
                                                                                                                                                                                                       C1054
   C878
                                                                                                                                                                                                                                  1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
                                1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                      C1055
   C879
                                                                                                                                                                                                       C1056
   C886
                                                                                                                                                                                                       C1057
   C887
                                                                                                                                                                                                       C1058
    C890
                                                                                                                                                                                                       C1061
    C891
                                                                                                                                                                                                                                  1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                       C1062
    C893
                                                                                                                                                                                                       C1063
    C894
                                                                                                                                                                                                       C1065
     C897
                                                                                                                                                                                                      C1068
     C898
     C899
                                                                                                                                                                                                                                  1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
                                                                                                                                                                                                       CN19
                                 1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                                                                       CN20
    C901
                                                                                                                                                                                                       CN21
    C902
    C908
                                                                                                                                                                                                      CV101
                                                                                                                                                                                                                                  1-141-229-00 s CAP, TRIMMER 7PF
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(AD-76 BOARD used for DFS-500) (AD-76 BOARD used for DFS-500) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 8-759-710-62 s IC NJM2246M 8-759-710-29 s IC NJM2235M 8-759-710-62 s IC NJM2246M 8-759-710-07 s IC NJM2234M 1-141-229-00 s CAP, TRIMMER 7PF IC102 CV201 IC103 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 IC104 D101 IC105 D102 IC106 8-759-711-32 s IC NJM2245M D103 D106 8-759-710-29 s IC NJM2235M 8-759-710-62 s IC NJM2246M 8-759-710-07 s IC NJM2234M 8-759-711-32 s IC NJM2234M 8-759-710-07 s IC NJM2234M 8-719-104-34 s DIODE 152835 IC107 D107 IC108 8-719-104-34 s DIODE 1S2835 IC109 D111 IC110 D112 IC111 D113 D121 8-759-711-32 s IC NJM2245M 8-759-925-74 s IC TC74HC04NS 8-759-926-99 s IC SN74HC4075NS 8-759-926-99 s IC SN74HC4075NS 8-759-925-85 s IC SN74HC32NS IC112 D122 IC113 IC114 8-719-105-57 s DIODE RD3.9M-B1 D123 8-719-157-23 s DIODE RD4.7M-B IC115 D124 8-719-915-43 s DIODE, VARICAP FC54M 8-719-915-43 s DIODE, VARICAP FC54M 8-719-104-34 s DIODE 182835 D125 IC116 D126 8-759-925-82 s IC SN74HC21NS 8-759-925-85 s IC SN74HC32NS 8-759-925-85 s IC SN74HC32NS 8-759-925-82 s IC SN74HC21NS 8-759-925-74 s IC TC74HC04NS IC117 D201 IC118 8-719-104-34 s DIODE 1S2835 IC119 IC120 D202 D203 IC121 D206 D207 8-752-334-55 s IC CXD1175M D211 8-752-342-61 s IC CXD2105AQ 8-759-710-29 s IC NJM2235M 8-759-710-07 s IC NJM2234M 8-759-987-27 s IC LM1881M IC123 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-104-34 s DIODE 1S2835 8-719-105-57 s DIODE RD3.9M-B1 IC124 IC125 D212 D213 D221 IC126 D222 8-759-111-69 s IC UPC1037HA 8-759-234-77 s IC TC4566F 8-759-983-69 s IC LM358PS 8-759-925-90 s IC SN74HC74NS 8-759-239-58 s IC TC74HC221AF IC127 D223 IC128 8-719-157-23 s DIODE RD4.7M-B 8-719-915-43 s DIODE, VARICAP FC54M 8-719-915-43 s DIODE, VARICAP FC54M 8-719-104-34 s DIODE 182835 IC129 IC130 D225 IC131 D226 D301 8-759-926-07 s IC SN74HC132NS 8-759-710-29 s IC NJM2235M 8-759-980-04 s IC LM311PS 8-759-603-54 s IC M51271FP 8-759-710-86 s IC NJM2233BM-T1 IC132 IC133 DL101 1-415-348-21 s DELAY LINE 280NS 1-415-309-00 s DELAY LINE 350nS 1-415-348-21 s DELAY LINE 280NS 1-415-348-21 s DELAY LINE 280NS IC134 DL102 IC137 DL103 IC138 **DL201** 1-415-309-00 s DELAY LINE 350nS **DL202** 8-759-710-86 s IC NJM2233BM-T1 8-759-926-07 s IC SN74HC132NS 8-759-980-04 s IC LM311PS 8-759-710-62 s IC NJM2246M 8-759-711-32 s IC NJM2245M IC139 **DL203** 1-415-348-21 s DELAY LINE 280NS IC140 IC141 1-239-085-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS IC142 FL101 IC143 FL102 FL103 8-759-711-32 s IC NJM2245M 8-752-334-55 s IC CXD1175M 8-752-334-55 s IC CXD1175M 8-752-334-55 s IC CXD1175M 8-759-926-82 s IC SN74HC574ANS IC144 FL111 IC145 IC146 FI.112 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS IC147 FI.113 IC148 FL114 FL115 8-759-926-82 s IC SN74HC574ANS 8-759-926-82 s IC SN74HC574ANS 8-759-710-29 s IC NJM2235M 8-759-980-04 s IC LM311PS 8-759-987-27 s IC LM1881M FL201 IC150 FL202 IC151 IC152 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS 1-239-085-11 s FILTER, LOW-PASS 1-235-758-11 s FILTER, LOW-PASS FL203 FL211 FL212 IC153 8-759-239-58 s IC TC74HC221AF 8-759-239-58 s IC TC74HC221AF 8-759-927-46 s IC SN74HC00NS 8-759-239-58 s IC TC74HC221AF 8-759-926-24 s IC SN74HC164NS IC154 FL213 IC155 FL214 IC156 IC157 1-235-758-11 s FILTER, LOW-PASS FL215 IC158 8-759-231-53 s IC TA7805S 8-759-520-06 s IC NJM7809FA 8-759-520-06 s IC NJM7809FA 8-759-701-87 s IC NJM7909FA 8-759-710-29 s IC NJM2235M IC1 8-759-925-90 s IC SN74HC74NS 8-759-925-90 s IC SN74HC74NS 8-759-927-46 s IC SN74HC00NS 8-759-927-46 s IC SN74HC00NS IC159 IC2 IC160 IC3 IC161 TC162



(AD-76 BOARD used for DFS-500)	(AD-76 BOARD used for DFS-500)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
IC163 8-759-925-90 s IC SN74HC74NS IC164 8-759-926-23 s IC SN74HC163NS IC165 8-759-926-23 s IC SN74HC163NS IC166 8-759-926-23 s IC SN74HC163NS IC167 8-759-925-74 s IC TC74HC04NS  IC168 8-759-925-74 s IC SN74HC20ANS IC169 8-759-927-46 s IC SN74HC00NS IC170 8-759-927-8 s IC SN74HC10NS IC171 8-759-239-58 s IC TC74HC21AF IC172 8-759-926-29 s IC SN74HC175NS	IC246 8-752-334-55 s IC CXD1175M IC247 8-752-334-55 s IC CXD1175M IC248 8-759-926-82 s IC SN74HC574ANS IC249 8-759-926-82 s IC SN74HC574ANS IC250 8-759-926-82 s IC SN74HC574ANS
IC168 8-759-925-81 s IC SN74HC20ANS IC169 8-759-927-46 s IC SN74HC00NS IC170 8-759-925-78 s IC SN74HC10NS IC171 8-759-239-58 s IC TC74HC221AF IC172 8-759-926-29 s IC SN74HC175NS	IC251 8-759-710-29 s IC NJM2235M IC252 8-759-980-04 s IC LM311PS IC253 8-759-987-27 s IC LM1881M IC254 8-759-239-58 s IC TC74HC221AF IC255 8-759-239-58 s IC TC74HC221AF
IC173 8-759-926-24 S IC SN74HC164NS IC174 8-759-927-46 S IC SN74HC00NS IC175 8-759-239-58 S IC TC74HC221AF IC176 8-749-901-21 S IC BX1461 IC177 8-759-908-17 S IC TL082CPS	IC256 8-759-927-46 8 IC SN74HC00NS IC257 8-759-239-58 8 IC TC74HC221AF IC258 8-759-926-24 8 IC SN74HC164NS IC259 8-759-925-90 8 IC SN74HC74NS IC260 8-759-925-90 8 IC SN74HC74NS
IC178 8-759-926-48 s IC SN74HC244NS IC179 8-759-926-03 s IC SN74HC113NS IC201 8-759-710-29 s IC NJM2235M IC202 8-759-710-62 s IC NJM2246M IC203 8-759-710-29 s IC NJM2235M	IC261       8-759-927-46       8 IC SN74HC00NS         IC262       8-759-927-46       8 IC SN74HC00NS         IC263       8-759-925-90       8 IC SN74HC74NS         IC264       8-759-926-23       8 IC SN74HC163NS         IC265       8-759-926-23       8 IC SN74HC163NS
IC204 8-759-710-62 S IC NJM2246M IC205 8-759-710-07 S IC NJM2234M IC206 8-759-711-32 S IC NJM2245M IC207 8-759-710-29 S IC NJM2235M IC208 8-759-710-62 S IC NJM2246M	IC266 8-759-926-23 S IC SN74HC163NS IC267 8-759-925-74 S IC TC74HC04NS IC268 8-759-925-81 S IC SN74HC20ANS IC269 8-759-927-46 S IC SN74HC00NS IC270 8-759-925-78 S IC SN74HC10NS
IC208 8-759-710-62 s IC NJM2246M  IC209 8-759-710-07 s IC NJM2234M IC210 8-759-711-32 s IC NJM2245M IC211 8-759-710-07 s IC NJM2234M IC212 8-759-711-32 s IC NJM2245M IC213 8-759-925-74 s IC TC74HC04NS	IC271 8-759-239-58 S IC TC74HC221AF IC272 8-759-926-29 S IC SN74HC175NS IC273 8-759-926-24 S IC SN74HC164NS IC274 8-759-927-46 S IC SN74HC00NS IC275 8-759-239-58 S IC TC74HC221AF
IC214 8-759-926-99 s IC SN74HC4075NS IC215 8-759-926-99 s IC SN74HC4075NS IC216 8-759-925-85 s IC SN74HC32NS IC217 8-759-925-82 s IC SN74HC21NS IC218 8-759-925-85 s IC SN74HC32NS	IC276 8-749-901-21 s IC BX1461 IC277 8-759-908-17 s IC TL082CPS IC278 8-759-926-48 s IC SN74HC244NS IC279 8-759-926-03 s IC SN74HC113NS IC301 8-759-702-08 s IC NJM360M
IC219 8-759-925-85 S IC SN74HC32NS IC220 8-759-925-82 S IC SN74HC21NS	IC302 8-759-925-73 s IC SN74HCO3NS
IC222 8-752-334-55 s IC CXD1175M IC223 8-752-342-61 s IC CXD2105AQ IC224 8-759-710-29 s IC NJM2235M	L1 1-412-525-31 s INDUCTOR 10uH L2 1-412-525-31 s INDUCTOR 10uH L3 1-412-525-31 s INDUCTOR 10uH L101 1-408-789-21 s INDUCTOR CHIP 100UH L102 1-408-785-21 s INDUCTOR CHIP 47UH
IC225 8-759-710-07 S IC NJM2234M IC226 8-759-987-27 S IC LM1881M IC227 8-759-111-69 S IC UPC1037HA IC228 8-759-234-77 S IC TC4S66F IC229 8-759-983-69 S IC LM358PS	L103 1-408-785-21 S INDUCTOR CHIP 47UH L104 1-408-789-21 S INDUCTOR CHIP 100UH L105 1-408-793-21 S INDUCTOR CHIP 220UH L111 1-408-797-11 S INDUCTOR CHIP 470UH
IC230 8-759-925-90 s IC SN74HC74NS IC231 8-759-239-58 s IC TC74HC221AF IC232 8-759-926-07 s IC SN74HC132NS IC233 8-759-710-29 s IC NJM2235M IC234 8-759-980-04 s IC LM311PS	L112 1-408-785-21 s INDUCTOR CHIP 47UH  L113 1-408-782-11 s INDUCTOR CHIP 27UH  L114 1-408-785-21 s INDUCTOR CHIP 47UH  L115 1-408-782-11 s INDUCTOR CHIP 27UH  L115 1-408-782-11 s INDUCTOR CHIP 27UH
IC237 8-759-603-54 s IC M51271FP IC238 8-759-710-86 s IC NJM2233BM-T1	L116 1-408-785-21 S INDUCTOR CHIP 47UH L117 1-408-785-21 S INDUCTOR CHIP 47UH
IC239 8-759-710-86 s IC NJM2233BM-T1 IC240 8-759-926-07 s IC SN74HC132NS IC241 8-759-980-04 s IC LM311PS	L118 1-408-785-21 s INDUCTOR CHIP 47UH L121 1-408-785-21 s INDUCTOR CHIP 47UH L122 1-408-785-21 s INDUCTOR CHIP 47UH L123 1-408-785-21 s INDUCTOR CHIP 47UH L124 1-408-785-21 s INDUCTOR CHIP 47UH
IC242 8-759-710-62 s IC NJM2246M IC243 8-759-711-32 s IC NJM2245M IC244 8-759-711-32 s IC NJM2245M IC245 8-752-334-55 s IC CXD1175M	L125 1-408-785-21 S INDUCTOR CHIP 47UH L126 1-408-785-21 S INDUCTOR CHIP 47UH

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(AD-76 BC	DARD used for DFS-500)	(AD-76 B	OARD used for DFS-500)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
L131	1-408-793-21 s INDUCTOR CHIP 220UH	Q151	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L132	1-408-765-21 s INDUCTOR, CHIP 1UH	Q152	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L201	1-408-789-21 s INDUCTOR CHIP 100UH	Q153	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L202	1-408-785-21 s INDUCTOR CHIP 47UH	Q154	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L203	1-408-785-21 s INDUCTOR CHIP 47UH	Q155	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L204	1-408-789-21 s INDUCTOR CHIP 100UH	Q156	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L205	1-408-793-21 s INDUCTOR CHIP 220UH	Q157	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L211	1-408-797-11 s INDUCTOR CHIP 470UH	Q158	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L212	1-408-785-21 s INDUCTOR CHIP 47UH	Q159	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L213	1-408-782-11 s INDUCTOR CHIP 27UH	Q160	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L214	1-408-785-21 S INDUCTOR CHIP 47UH	0171	8-729-116-64 s TRANSISTOR 2SK508-K51
L215	1-408-782-11 S INDUCTOR CHIP 27UH	0172	8-729-216-22 s TRANSISTOR 2SA1162
L216	1-408-785-21 S INDUCTOR CHIP 47UH	0173	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L217	1-408-785-21 S INDUCTOR CHIP 47UH	0174	8-729-116-64 s TRANSISTOR 2SK508-K51
L218	1-408-785-21 S INDUCTOR CHIP 47UH	0175	8-729-216-22 s TRANSISTOR 2SA1162
L221	1-408-785-21 S INDUCTOR CHIP 47UH	0176	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L222	1-408-785-21 S INDUCTOR CHIP 47UH	0177	8-729-116-64 s TRANSISTOR 2SK508-K51
L223	1-408-785-21 S INDUCTOR CHIP 47UH	0178	8-729-216-22 s TRANSISTOR 2SA1162
L224	1-408-785-21 S INDUCTOR CHIP 47UH	0179	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L225	1-408-785-21 S INDUCTOR CHIP 47UH	0180	8-729-216-22 s TRANSISTOR 2SA1162
L226 L231 L232 L301	1-408-785-21 s INDUCTOR CHIP 47UH 1-408-793-21 s INDUCTOR CHIP 220UH 1-408-765-21 s INDUCTOR, CHIP 1UH 1-408-789-21 s INDUCTOR CHIP 100UH	Q191 Q192 Q193 Q201	8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
LV101 LV201	1-410-286-11 s INDUCTOR, VAR 1uH 1-410-286-11 s INDUCTOR, VAR 1uH	Q203	8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-116-64 s TRANSISTOR 2SK508-K51
PS1 PS2 PS3	1-410-286-11 s INDUCTOR, VAR 1uH 1-410-286-11 s INDUCTOR, VAR 1uH 1-532-637-00 s LINK, IC 1.0A 1-532-605-00 s LINK, IC 0.4A 1-532-637-00 s LINK, IC 1.0A		8-729-116-22 s TRANSISTOR 2SA1162 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q101	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q208	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q102	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q211	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q103	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q212	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q104	8-729-116-64 s TRANSISTOR 2SK508-K51	Q213	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q105	8-729-216-22 s TRANSISTOR 2SA1162	Q214	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q106	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q215	8-729-216-22 s TRANSISTOR 2SA1162
Q107	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q221	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q108	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q222	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q111	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q223	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q112	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q224	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q113	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q225	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q114	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q231	8-729-216-22 s TRANSISTOR 2SA1162
Q115	8-729-216-22 s TRANSISTOR 2SA1162	Q232	8-729-216-22 s TRANSISTOR 2SA1162
Q121	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q233	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q122	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q234	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q123	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q235	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q124	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q236	8-729-216-22 s TRANSISTOR 2SA1162
Q125	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q237	8-729-216-22 s TRANSISTOR 2SA1162
Q131	8-729-216-22 s TRANSISTOR 2SA1162	Q238	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q132	8-729-216-22 s TRANSISTOR 2SA1162	Q239	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q133	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q240	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q134	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q241	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q135	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q251	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q136	8-729-216-22 s TRANSISTOR 2SA1162	Q252	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q137	8-729-216-22 s TRANSISTOR 2SA1162	Q253	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q138	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q254	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q139	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q255	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q140	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q256	8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q141	8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q257	8-729-120-28 s TRANSISTOR 2SC1623-L5L6

DFS-500/5 ?

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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
                                                                                                                                                                                                      Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                       SP Description
                                                                  SP Description
                                                                                                                                                                                                                                   1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-603-11 s METAL, CHIP 10 0.5% 1/10W
                            8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-116-64 s TRANSISTOR 2SK508-K51
8-729-216-22 s TRANSISTOR 2SA1162
                                                                                                                                                                                                       R136
Q258
                                                                                                                                                                                                       R137
 Q259
                                                                                                                                                                                                       R138
Q260
                                                                                                                                                                                                       R139
 Q271
                                                                                                                                                                                                       R145
                                                                                                                                                                                                                                   1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W
                             8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                                                                                       R146
 0273
                             8-729-116-64 s TRANSISTOR 25K508-K51
8-729-216-22 s TRANSISTOR 25K162
8-729-120-28 s TRANSISTOR 25C1623-L5L6
8-729-116-64 s TRANSISTOR 25K508-K51
Q274
Q275
Q276
                                                                                                                                                                                                       R147
                                                                                                                                                                                                       R148
                                                                                                                                                                                                        R149
                                                                                                                                                                                                        R155
                                                                                                                                                                                                                                   1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
 Q278
Q279
Q280
                                                                                                                                                                                                        R156
                              8-729-216-22 s TRANSISTOR 2SA1162
                             8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-216-22 s TRANSISTOR 2SA1162
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                                                                                        R157
                                                                                                                                                                                                        R158
                                                                                                                                                                                                        R159
  G291
                                                                                                                                                                                                        R205
  Q292
                                                                                                                                                                                                                                    1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                              8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
                                                                                                                                                                                                        R206
  Q293
 0301
0302
0303
                                                                                                                                                                                                        R207
                              8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-116-64 s TRANSISTOR 2SK508-K51
                                                                                                                                                                                                        R208
                                                                                                                                                                                                        R209
                                                                                                                                                                                                        R215
  Q304
                                                                                                                                                                                                                                    1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                               8-729-216-22 s TRANSISTOR 2SA1162
8-729-120-28 s TRANSISTOR 2SC1623-L5L6
8-729-112-65 s TRANSISTOR 2SA1462-Y33
                                                                                                                                                                                                        R216
  Q305
                                                                                                                                                                                                        R217
  Q306
                                                                                                                                                                                                        R218
   Q307
                                                                                                                                                                                                         R219
                         A1-216-377-11 S METAL 4.7 5% 2W
A1-216-377-11 S METAL 4.7 5% 2W
1-216-371-00 S METAL 1.5 5% 2W
1-216-371-00 S METAL 1.5 5% 2W
                                                                                                                                                                                                         R225
  R1
  R2
                                                                                                                                                                                                                                    1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                                                                                                                                                                                         R226
  R3
                                                                                                                                                                                                        R227
R228
  R4
                               1-216-377-11 S METAL 4.7 5% 2W
                                                                                                                                                                                                         R229
                               1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                                                                                         R235
  R12
  R13
                                                                                                                                                                                                                                    1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W
                                                                                                                                                                                                         R236
  R14
                                                                                                                                                                                                         R237
   R16
                                                                                                                                                                                                         R238
                                                                                                                                                                                                         R239
                               1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                                                                                                                                                                                        R245
   R23
                                                                                                                                                                                                                                     1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W
                                                                                                                                                                                                         R246
  R30
                                                                                                                                                                                                         R247
   R32
                                                                                                                                                                                                         R248
   R41
                                                                                                                                                                                                         R249
                               1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
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   R47
                                                                                                                                                                                                                                     1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6% 0.5% 1/10W
                                                                                                                                                                                                         R256
   R48
                                                                                                                                                                                                         R257
   R49
                                                                                                                                                                                                         R258
   R105
                                                                                                                                                                                                         R259
                               1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                                                                                                                                                                                         R302
   R106
   R107
                                                                                                                                                                                                                                     1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W
                                                                                                                                                                                                         R304
   R108
                                                                                                                                                                                                         R305
   R109
                                                                                                                                                                                                         R306
   R115
                                                                                                                                                                                                         R308
                                1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                                                                                                                                                                                         R309
   R116
   R117
                                                                                                                                                                                                                                     1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W
1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W
1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
                                                                                                                                                                                                         R310
  R118
R119
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   R125
                                                                                                                                                                                                         R314
                                 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
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   R127
                                                                                                                                                                                                                                     1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
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   R128
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   R129
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   R135
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1-216-681-11 s METAL, CHIP 18K 0.5% 1/10W

R617

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(AD-76 BOARD used for DFS-500)
(AD-76 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                  or Q'ty Part No.
                                                                      SP Description
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                             1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-653-11 s METAL, CHIP 1.2K 0.5% 1/10W
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 R618
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 R622
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 R623
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 R624
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 R626
                             1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-768-11 s METAL 470K 0.5% 1/10W 1-216-619-11 s METAL, CHIP 47 0.5% 1/10W
                                                                                                                                                                                                                                              1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W
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 R634
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 R640
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  R641
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  R643
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  R644
                               1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
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  R645
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  R646
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  R647
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 R648
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  R650
                               1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W
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  R653
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  R658
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  R660
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  R663
                               1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-776-11 s METAL 1M 0.5% 1/10W
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  R670
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  R672
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  R678
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  R681
                                1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-697-11 s METAL, CHIP 82% 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
1-218-764-11 s METAL 330% 0.5% 1/10W
1-216-669-11 s METAL, CHIP 5.6% 0.5% 1/10W
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   R684
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  R688
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  R689
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   R695
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   R702
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                                1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
  R704
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   R705
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   R706
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  R711
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                                 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W
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   R714
                                1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W

1-216-635-11 s METAL, CHIP 220 0.5% 1/10W

1-216-649-11 s METAL, CHIP 820 0.5% 1/10W

1-216-663-11 s METAL, CHIP 820 0.5% 1/10W
  R720
R723
R725
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                                1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
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   R729
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  R740
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   R745
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                                1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
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   R749
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R753
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                                1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W
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                                1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
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   R761
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  R766
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  R767
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(AD-76 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No.
                                                                                                                                                                                     or Q'ty Part No.
                                                                                                                                                                                                                                                SP Description
                                                             SP Description
                                                                                                                                                                                                               1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-989-00 s RES, ADJ METAL 470
                          1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
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R895
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 R898
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 R904
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 R905
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1-228-990-00 s RES, ADJ METAL 1K
1-230-504-11 s RES, ADJ METAL 220
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
                          1-218-764-11 S METAL 330K 0.5% 1/10W
1-216-657-11 S METAL, CHIP 1.8K 0.5% 1/10W
1-218-772-11 S METAL 680K 0.5% 1/10W
1-216-687-11 S METAL, CHIP 33K 0.5% 1/10W
1-216-689-11 S METAL, CHIP 39K 0.5% 1/10W
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 R913
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 R917
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 R919
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 R920
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 R921
                           1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W
                                                                                                                                                                                                               1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
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 R924
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  R925
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 R936
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 R937
                                                                                                                                                                                      RV201
  R941
                           1-218-760-11 s METAL 220K 0.5% 1/10W
1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W
1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
                                                                                                                                                                                                                1-228-993-00 s RES, ADJ METAL 4.7K
1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
 R942
                                                                                                                                                                                       RV202
                                                                                                                                                                                       RV203
  R944
                                                                                                                                                                                      RV211
RV212
  R949
  R950
                                                                                                                                                                                       RV213
  R951
                                                                                                                                                                                                                1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 170
1-228-990-00 s RES, ADJ METAL 1K
1-230-504-11 s RES, ADJ METAL 220
1-228-989-00 s RES, ADJ METAL 470
                           1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
  R952
                                                                                                                                                                                       RV215
  R953
                                                                                                                                                                                       RV216
  R954
                                                                                                                                                                                       RV217
   R955
   R956
                                                                                                                                                                                       RV218
                           1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
1-218-764-11 s METAL 330K 0.5% 1/10W
1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
1-218-772-11 s METAL 680K 0.5% 1/10W
                                                                                                                                                                                                                1-228-989-00 s RES, ADJ METAL 470
                                                                                                                                                                                       RV219
  R957
                                                                                                                                                                                                                1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
                                                                                                                                                                                       RV221
   R958
                                                                                                                                                                                       RV222
RV223
   R1013
   R1017
                                                                                                                                                                                       RV231
   R1019
                           1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W
                                                                                                                                                                                       RV301
                                                                                                                                                                                                                1-237-503-21 s RES, ADJ METAL 10K
1-228-990-00 s RES, ADJ METAL 1K
                                                                                                                                                                                       RV302
   R1021
   R1024
                                                                                                                                                                                                               1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
   R1025
   R1036
                            1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
   R1037
   R1041
                                                                                                                                                                                                                1-577-089-11 s VCO, CRYSTAL 14.318180MHz
1-567-866-11 s CRYSTAL, 14.31818MHz
1-577-089-11 s VCO, CRYSTAL 14.318180MHz
1-567-866-11 s CRYSTAL, 14.31818MHz
                                                                                                                                                                                       X101
   R1042
                                                                                                                                                                                       X102
   R1043
                                                                                                                                                                                       X201
   R1044
                                                                                                                                                                                       X202
                            1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
   R1049
   R1050
   R1051
   R1052
   R1053
                            1-218-760-11 s METAL 220K 0.5% 1/10W
1-218-764-11 s METAL 330K 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
   R1054
   R1055
   R1056
   R1057
   R1058
                            1-231-385-00 s RESISTOR BLOCK 4.7Kx8
   RB1
                            1-231-385-00 s RESISTOR BLOCK 4.7Kx8
   RB2
   RB3
   RB101
                            1-231-385-00 s RESISTOR BLOCK 4.7Kx8
   RB102
                          1-231-385-00 s RESISTOR BLOCK 4.7Kx8
   RB103
                            1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
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RV101 RV102



AD-76P BOARD used for DFS-500P	(AD-76P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc A-8271-697-A 0 MOUNTED CIRCUIT BOARD, AD-76P 2pcs 3-166-184-01 0 LEVER, PC BOARD 2pcs 3-166-185-01 s NUT, PLATE 1pc 3-178-157-01 0 PLATE, SHIELD 8pcs 4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6	C119 1-162-638-11 s CERAMIC, CHIP 1uF 16V C120 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C121 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C122 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C123 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
2pcs 7-622-207-05 s N 2.6, TYPE 2 2pcs 7-626-320-11 s PIN, SPRING 3X8 6pcs 7-628-254-40 s SCREW +PS 2.6X12	C125 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C126 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C127 1-162-638-11 s CERAMIC, CHIP 1uF 16V C128 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C4 1-162-638-11 S CERAMIC, CHIP 1uF 16V C5 1-126-934-11 S ELECT 220uF 20% 16V	C129 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C130 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C131 1-126-396-11 s ELECT, CHIP 47uF 20% 16V  C133 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C134 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C135 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C6 1-162-638-11 s CERAMIC, CHIP 1uF 16V C7 1-162-638-11 s CERAMIC, CHIP 1uF 16V C8 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C9 1-126-934-11 s ELECT 220uF 20% 16V C10 1-162-638-11 s CERAMIC, CHIP 1uF 16V	C136 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C137 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C138 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C139 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C141 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C11 1-162-638-11 S CERAMIC, CHIP 1uF 16V C12 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C13 1-126-934-11 S ELECT 220uF 20% 16V C14 1-162-638-11 S CERAMIC, CHIP 1uF 16V C15 1-162-638-11 S CERAMIC, CHIP 1uF 16V	C142 1-126-394-11 S ELECT, CHIP 10UF 20% 16V C143 1-162-638-11 S CERAMIC, CHIP 1UF 16V C144 1-126-394-11 S ELECT, CHIP 10UF 20% 16V C145 1-126-394-11 S ELECT, CHIP 10UF 20% 16V C146 1-126-394-11 S ELECT, CHIP 10UF 20% 16V
C16 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C17 1-126-934-11 S ELECT 220uF 20% 16V C18 1-162-638-11 S CERAMIC, CHIP 1uF 16V C19 1-126-934-11 S ELECT 220uF 20% 16V C20 1-162-638-11 S CERAMIC, CHIP 1uF 16V  C21 1-126-934-11 S ELECT 220uF 20% 16V	C146 1-126-394-11 S ELECT, CHIP 10UF 20% 16V  C147 1-126-396-11 S ELECT, CHIP 47UF 20% 16V  C201 1-126-394-11 S ELECT, CHIP 10UF 20% 16V  C202 1-126-394-11 S ELECT, CHIP 10UF 20% 16V  C203 1-162-638-11 S CERAMIC, CHIP 10F 16V  C204 1116-234-11 S ELECT
C21 1-126-934-11 S ELECT 220uf 20% 16V C22 1-162-638-11 S CERAMIC, CHIP 1uF 16V C23 1-162-638-11 S CERAMIC, CHIP 1uF 16V C24 1-126-396-11 S ELECT, CHIP 47uf 20% 16V C25 1-126-925-11 S ELECT 470uf 20% 10V	C204 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C205 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C206 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C207 1-126-396-11 S ELECT, CHIP 10uF 20% 16V C209 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C210 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C28 1-162-638-11 s CERAMIC, CHIP 1uF 16V C31 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C35 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V	C211 1-162-638-11 S CERAMIC, CHIP 1UF 16V C212 1-126-394-11 S ELECT, CHIP 10UF 20% 16V C213 1-126-394-11 S ELECT, CHIP 10UF 20% 16V C214 1-126-394-11 S ELECT, CHIP 10UF 20% 16V
C36 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C37 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C39 1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V C41 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C101 1-126-394-11 S ELECT, CHIP 10uF 20% 16V	C217 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C218 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C219 1-162-638-11 S CERAMIC, CHIP 1uF 16V C220 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C102 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C103 1-162-638-11 S CERAMIC, CHIP 1uF 16V C104 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C105 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C106 1-126-394-11 S ELECT, CHIP 10uF 20% 16V	C221 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C222 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C223 1-126-396-11 s ELECT, CHIP 47uF 20% 16V  C225 1-126-394-11 s ELECT, CHIP 10uF 20% 16V  C226 1-126-394-11 s ELECT, CHIP 10uF 20% 16V
C107 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C109 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C110 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C111 1-162-638-11 s CERAMIC, CHIP 1uF 16V C112 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C227 1-162-638-11 s CERAMIC, CHIP 1uF 16V  C228 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C229 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C230 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C231 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C113 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C114 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C115 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C117 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C118 1-126-394-11 S ELECT, CHIP 10uF 20% 16V	C233 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C234 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C235 1-162-638-11 s CERAMIC, CHIP 1uF 16V C236 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C237 1-126-394-11 s ELECT, CHIP 10uF 20% 16V

(AD-76P BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
C238 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C239 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C241 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C242 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C243 1-162-638-11 S CERAMIC, CHIP 1uF 16V	C421 1-126-392-11 S ELECT, CHIP 100uF 20% 6.3V C432 1-163-224-11 S CERAMIC 7PF 0.25PF 50V C441 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C442 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C443 1-126-394-11 S ELECT, CHIP 10uF 20% 16V
C244 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C245 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C246 1-126-394-11 S ELECT, CHIP 10uF 20% 16V C247 1-126-396-11 S ELECT, CHIP 47uF 20% 16V C301 1-163-222-11 S CERAMIC, CHIP 5PF 50V	
C302 1-163-222-11 S CERAMIC, CHIP 5PF 50V C304 1-163-227-11 S CERAMIC, CHIP 10PF 5X 50V C305 1-126-394-11 S ELECT, CHIP 10UF 20X 16V C306 1-126-396-11 S ELECT, CHIP 47UF 20X 16V C307 1-162-638-11 S CERAMIC, CHIP 1UF 16V	C455 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C459 1-164-232-11 s CERAMIC 0.01uF 10% 100V C461 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C463 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C466 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C309 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C310 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C311 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C312 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C313 1-162-638-11 s CERAMIC, CHIP 1uF 16V	C467 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C470 1-164-232-11 s CERAMIC 0.01uF 10% 100V C471 1-164-232-11 s CERAMIC 0.01uF 10% 100V C482 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C483 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
C318 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V C319 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C321 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C332 1-163-224-11 s CERAMIC 7PF 0.25PF 50V C341 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C485 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C486 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C487 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C488 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C501 1-126-394-11 s ELECT, CHIP 10
C342 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C343 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C344 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C347 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C351 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V	C502 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C507 1-162-638-11 s CERAMIC, CHIP 1uF 16V C508 1-162-638-11 s CERAMIC, CHIP 1uF 16V C510 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C521 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
C352 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C353 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C355 1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V C359 1-164-232-11 s CERAMIC 0.01UF 10% 100V C361 1-126-394-11 s ELECT, CHIP 10UF 20% 16V	C523 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C524 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C525 1-162-638-11 s CERAMIC, CHIP 1uF 16V C526 1-164-005-11 s CERAMIC, CHIP 0.47uF 25V C527 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C363 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C366 1-162-638-11 s CERAMIC, CHIP 1uF 16V C367 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C370 1-164-232-11 s CERAMIC 0.01uF 10% 100V C371 1-164-232-11 s CERAMIC 0.01uF 10% 100V	C528 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C529 1-163-035-00 s CERAMIC, CHIP 0.047uF 50V C530 1-162-638-11 s CERAMIC, CHIP 1uF 16V C531 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C534 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
C382 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C383 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C385 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C386 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V C387 1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V	C536 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V C537 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C539 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C540 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C541 1-164-232-11 s CERAMIC 0.01uF 10% 100V
C388 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V C401 1-163-222-11 s CERAMIC, CHIP 5PF 50V C402 1-163-222-11 s CERAMIC, CHIP 5PF 50V C404 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C405 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C542 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C543 1-163-089-00 s CERAMIC, CHIP 6PF 50V C544 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C545 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V C546 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
C406 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C407 1-162-638-11 s CERAMIC, CHIP 1uF 16V C409 1-126-396-11 s ELECT, CHIP 47uF 20% 16V C410 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C411 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V	C547 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C548 1-126-394-11 s ELECT, CHIP 10uF 20% 16V C560 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C563 1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V C565 1-164-232-11 s CERAMIC 0.01uF 10% 100V
C412 1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V C413 1-162-638-11 s CERAMIC, CHIP 1uF 16V C418 1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V C419 1-126-394-11 s ELECT, CHIP 10uF 20% 16V	C566 1-126-392-11 s ELECT, CHIP 100UF 20% 6.3V C571 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C572 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V C575 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V



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(AD-76P BOARD used for DFS-500P)
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                                                                        Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                           SP Description
or Q'ty Part No.
                                                                  SP Description
                            1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                                                                                                     1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-104-601-21 s ELECT 10uF 20% 10V
                                                                                                                                                                                                         C703
 C576
                                                                                                                                                                                                         C704
C585
                                                                                                                                                                                                         C720
 C586
                                                                                                                                                                                                         C740
 C587
                                                                                                                                                                                                         C751
                            1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V

1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                                         C752
                                                                                                                                                                                                                                      1-104-601-21 s ELECT 10uF 20% 10V
 C589
                                                                                                                                                                                                                                     1-126-396-11 s ELECT, CHIP 47uF 20% 16V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                         C753
 C590
C592
                                                                                                                                                                                                         C756
                                                                                                                                                                                                         C757
 C593
                                                                                                                                                                                                         C759
 C594
                                                                                                                                                                                                                                     1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
                             1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                         C760
 C595
                                                                                                                                                                                                         C763
 C601
                                                                                                                                                                                                          C764
 C602
                                                                                                                                                                                                          C765
 C607
                                                                                                                                                                                                         C766
 C608
                                                                                                                                                                                                                                     1-104-601-21 s ELECT 10uF 20% 10V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                             1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                         C767
 C610
                                                                                                                                                                                                         C770
 C621
 C623
                                                                                                                                                                                                         C771
                                                                                                                                                                                                          C773
 C624
                                                                                                                                                                                                          C774
 C625
                                                                                                                                                                                                                                     1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-162-638-11 s CERAMIC, CHIP 1uF 16V 1-104-601-21 s ELECT 10uF 20% 10V 1-104-601-21 s ELECT 10uF 20% 10V
                              1-164-005-11 s CERAMIC, CHIP 0.47uF 25V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-163-035-00 s CERAMIC, CHIP 0.047uF 50V

1-163-035-00 s CERAMIC, CHIP 0.047uF 50V

1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                         C777
                                                                                                                                                                                                         C778
C779
 C627
 C628
                                                                                                                                                                                                          C786
  C629
                                                                                                                                                                                                         C787
  C630
                                                                                                                                                                                                                                     1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                              1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                                         C790
  C631
                                                                                                                                                                                                         C791
  C634
                                                                                                                                                                                                         C793
  C636
                                                                                                                                                                                                          C794
  C637
                                                                                                                                                                                                         C797
  C639
                              1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-164-232-11 s CERAMIC 0.01uF 10% 100V

1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V

1-163-089-00 s CERAMIC, CHIP 6PF 50V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
                                                                                                                                                                                                                                     1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                          C798
  C640
                                                                                                                                                                                                          C799
 C641
                                                                                                                                                                                                          C801
  C642
                                                                                                                                                                                                          C802
  C643
                                                                                                                                                                                                         C803
  C644
                              1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V

1-126-394-11 s ELECT, CHIP 10uF 20% 16V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                                                                                                                                                                                                                                     1-163-087-00 s CERAMIC, CHIP 4PF 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-104-601-21 s ELECT 10uF 20% 10V

1-104-601-21 s ELECT 10uF 20% 10V
                                                                                                                                                                                                          C804
 C645
 C646
                                                                                                                                                                                                          C820
                                                                                                                                                                                                          C840
  C647
                                                                                                                                                                                                          C851
  C648
                                                                                                                                                                                                          C852
  C660
                              1-126-398-11 s ELECT, CHIP 4.7uF 20% 35V

1-164-232-11 s CERAMIC 0.01uF 10% 100V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V

1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                                                                     1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
                                                                                                                                                                                                          C853
  C663
                                                                                                                                                                                                          C856
 C665
                                                                                                                                                                                                         C857
  C666
                                                                                                                                                                                                         C859
  C671
                                                                                                                                                                                                         C860
  C672
                                                                                                                                                                                                                                     1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
                              1-163-227-11 S CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V
1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 S CERAMIC, CHIP 33PF 5% 50V
                                                                                                                                                                                                          C863
                                                                                                                                                                                                          C864
  C676
                                                                                                                                                                                                         C865
  C685
                                                                                                                                                                                                         C866
  C686
                                                                                                                                                                                                         C867
  C687
                                                                                                                                                                                                                                     1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
                              1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
                                                                                                                                                                                                         C870
  C688
                                                                                                                                                                                                         C871
  C689
 C690
                                                                                                                                                                                                         C873
                                                                                                                                                                                                         C874
  C692
                                                                                                                                                                                                         C877
  C693
                                                                                                                                                                                                                                    1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-104-601-21 s ELECT 10uF 20% 10V
1-104-601-21 s ELECT 10uF 20% 10V
                              1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                                                                         C878
  C694
 C695
                                                                                                                                                                                                         C879
 C701
                                                                                                                                                                                                         C886
 C702
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(AD-76P BOARD used for DFS-500P)
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                        Ref. No.
Ref. No. or Q'ty Part No. SP Description
                                                                                                                                                        or Q'ty Part No.
                                                                                                                                                                                                          SP Description
                                                                                                                                                                             1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-133-00 s CERAMIC, CHIP 470FF 5% 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
                     1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
C890
                                                                                                                                                        C1061
C891
                                                                                                                                                        C1062
C893
                                                                                                                                                        C1063
C894
C897
                                                                                                                                                        C1065
                     1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 1uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100F 5% 50V
                                                                                                                                                        C1068
                                                                                                                                                                              1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
ሮደባደ
C899
                                                                                                                                                                             1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-506-748-11 o CONNECTOR, DIN 96P, MALE
                                                                                                                                                        CN19
 C901
                                                                                                                                                        CN20
 C902
                                                                                                                                                        CN21
 C908
                      1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V
1-126-392-11 S ELECT, CHIP 100UF 20% 6.3V
1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V
1-163-275-11 S CERAMIC, CHIP 0.001UF 5% 50V
1-163-251-11 S CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                                              1-141-229-00 s CAP, TRIMMER 7PF
1-141-229-00 s CAP, TRIMMER 7PF
                                                                                                                                                         CV101
 C909
                                                                                                                                                         CV201
 C911
 C915
                                                                                                                                                                              8-719-104-34 s DIODE 1S2835
                                                                                                                                                         D101
  C916
                                                                                                                                                         D102
  C918
                                                                                                                                                        D103
                      1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V

1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V

1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V

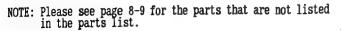
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
 C919
                                                                                                                                                         D106
                                                                                                                                                         D107
 C922
  C923
                                                                                                                                                                              8-719-104-34 s DIODE 1S2835
                                                                                                                                                         D111
  C927
                                                                                                                                                         D112
  C930
                                                                                                                                                         D113
                       1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V

1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V

1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

1-126-396-11 s ELECT, CHIP 47uF 20% 16V
                                                                                                                                                         D121
  C944
C945
                                                                                                                                                        D122
                                                                                                                                                                               8-719-105-57 s DIODE RD3.9M-B1
  C946
                                                                                                                                                         D124
                                                                                                                                                                               8-719-157-23 s DIODE RD4.7M-B
   C952
                                                                                                                                                                              8-719-915-43 s DIODE, VARICAP FC54M
8-719-915-43 s DIODE, VARICAP FC54M
8-719-104-34 s DIODE 1S2835
                                                                                                                                                        D125
D126
                       1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
   C953
                                                                                                                                                         D201
   C954
   C955
                                                                                                                                                         D202
                                                                                                                                                                               8-719-104-34 s DIODE 1S2835
   C956
                                                                                                                                                                               8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                         D203
   C957
                                                                                                                                                         D206
                       1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-133-00 s CERAMIC, CHIP 470PF 5% 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
                                                                                                                                                                               8-719-104-34 s DIODE 152835
8-719-104-34 s DIODE 152835
                                                                                                                                                         D207
                                                                                                                                                         D211
   C961
   C962
                                                                                                                                                                               8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                         D212
   C963
                                                                                                                                                         D213
   C965
                                                                                                                                                                               8-719-104-34 s DIODE 1S2835
8-719-104-34 s DIODE 1S2835
                                                                                                                                                         D221
                        1-163-239-11 s CERAMIC, CHIP 33PF 5% 50V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-126-394-11 s ELECT, CHIP 10uF 20% 16V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                         D222
                                                                                                                                                                               8-719-105-57 s DIODE RD3.9M-B1
                                                                                                                                                         D223
   C1001
   C1002
                                                                                                                                                         D224
                                                                                                                                                                               8-719-157-23 s DIODE RD4.7M-B
   C1008
                                                                                                                                                                              8-719-915-43 s DIODE, VARICAP FC54M
8-719-915-43 s DIODE, VARICAP FC54M
8-719-104-34 s DIODE, 152835
                                                                                                                                                         D225
   C1009
                                                                                                                                                         D226
                        1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
                                                                                                                                                         D301
   C1011
   C1015
                                                                                                                                                                               1-415-348-21 S DELAY LINE 280NS
1-415-309-00 S DELAY LINE 350NS
                                                                                                                                                         DL101
   C1016
                                                                                                                                                         DL102
   C1018
                                                                                                                                                                               1-415-348-21 S DELAY LINE 280NS
1-415-348-21 S DELAY LINE 280NS
                                                                                                                                                         DL103
   C1019
                                                                                                                                                          DL201
                        1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-126-392-11 s ELECT, CHIP 100uF 20% 6.3V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                         DL202
                                                                                                                                                                               1-415-309-00 s DELAY LINE 350nS
   C1022
   C1023
                                                                                                                                                         DL203
                                                                                                                                                                               1-415-348-21 s DELAY LINE 280NS
   C1027
   C1030
                                                                                                                                                                              1-239-085-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                         FL101
   C1039
                                                                                                                                                         FL102
                        1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-164-004-11 s CERAMIC, CHIP 0.1uF 10% 25V
1-163-275-11 s CERAMIC, CHIP 0.001uF 5% 50V
1-126-396-11 s ELECT, CHIP 47uF 20% 16V
1-163-137-00 s CERAMIC, CHIP 680PF 5% 50V
                                                                                                                                                         FL103
   C1044
                                                                                                                                                         FL111
   C1045
   C1046
   C1052
                                                                                                                                                         FI.113
                                                                                                                                                                               1-239-085-11 s FILTER, LOW-PASS
                                                                                                                                                         FL114
                                                                                                                                                                               1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                                              1-235-758-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
                                                                                                                                                         FL115
                        1-164-232-11 s CERAMIC 0.01uF 10% 100V
   C1054
                        1-126-396-11 S ELECT, CHIP 47UF 20% 16V
1-126-394-11 B ELECT, CHIP 10UF 20% 16V
1-164-005-11 S CERAMIC, CHIP 0.47UF 25V
                                                                                                                                                          FL201
   C1055
                                                                                                                                                                               1-239-085-11 s FILTER, LOW-PASS
   C1056
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(AD-76P BOARD used for DFS-500P)
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                            Ref. No.
Ref. No. or Q'ty Part No.
                                                                                                                                                            or Q'ty Part No.
                                                                                                                                                                                                          SP Description
                                                   SP Description
                                                                                                                                                                                  8-759-926-82 s IC SN74HC574ANS
8-759-926-82 s IC SN74HC574ANS
8-759-710-29 s IC NJM2235M
8-759-980-04 s IC LM311PS
8-759-987-27 s IC LM1881M
                     1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                             IC149
FL203
FL211
FL212
                                                                                                                                                             IC150
                                                                                                                                                             IC151
                                                                                                                                                             IC152
FL213
                                                                                                                                                             IC153
                                                                                                                                                                                  8-759-239-58 s IC TC74HC221AF
8-759-239-58 s IC TC74HC221AF
8-759-927-46 s IC SN74HC00NS
8-759-239-58 s IC TC74HC221AF
8-759-926-24 s IC SN74HC164NS
                      1-235-758-11 s FILTER, LOW-PASS
                                                                                                                                                             IC154
 FL215
                                                                                                                                                             TC155
                      8-759-231-53 S IC TA7805S
8-759-520-06 S IC NJM7809FA
8-759-520-06 S IC NJM7809FA
8-759-701-87 S IC NJM7909FA
8-759-710-29 S IC NJM2235M
                                                                                                                                                             IC156
 IC1
                                                                                                                                                             IC157
 IC2
                                                                                                                                                             IC158
 IC3
IC4
                                                                                                                                                                                   8-759-925-90 s IC SN74HC74NS
8-759-925-90 s IC SN74HC74NS
                                                                                                                                                             IC159
 IC101
                                                                                                                                                             IC160
                                                                                                                                                                                  8-759-927-46 s IC SN74HC00NS
8-759-927-46 s IC SN74HC00NS
8-759-927-46 s IC SN74HC00NS
8-759-925-90 s IC SN74HC74NS
                                                                                                                                                             IC161
 TC1 02
                       8-759-710-62 s IC NJM2246M
                       8-759-710-29 s IC NJM2235M
8-759-710-62 s IC NJM2236M
8-759-710-07 s IC NJM2234M
8-759-711-32 s IC NJM2245M
                                                                                                                                                             IC162
 IC103
                                                                                                                                                             IC163
 IC104
  IC105
                                                                                                                                                                                   8-759-926-23 s IC SN74HC163NS
8-759-926-23 s IC SN74HC163NS
8-759-926-23 s IC SN74HC163NS
8-759-925-74 s IC TC74HC04NS
                                                                                                                                                              IC164
  IC106
                                                                                                                                                             IC165
                       8-759-710-29 s IC NJM2235M
8-759-710-62 s IC NJM2246M
8-759-710-07 s IC NJM2234M
8-759-711-32 s IC NJM2245M
8-759-710-07 s IC NJM2234M
                                                                                                                                                             IC166
  IC107
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  IC108
IC109
                                                                                                                                                                                   8-759-925-81 s IC SN74HC20ANS
                                                                                                                                                              IC168
  IC110
                                                                                                                                                                                   8-759-927-46 s IC SN74HC00NS
8-759-925-78 s IC SN74HC10NS
8-759-239-58 s IC TC74HC221AF
8-759-926-29 s IC SN74HC175NS
8-759-926-24 s IC SN74HC164NS
  IC111
                                                                                                                                                              IC170
                        8-759-711-32 s IC NJM2245M
8-759-925-74 s IC TC74HC04NS
8-759-926-99 s IC SN74HC4075NS
8-759-926-99 s IC SN74HC4075NS
8-759-925-85 s IC SN74HC32NS
                                                                                                                                                             IC171
  IC112
                                                                                                                                                              IC172
  IC113
                                                                                                                                                              IC173
  IC114
IC115
                                                                                                                                                                                   8-759-927-46 s IC SN74HC00NS
8-759-239-58 s IC TC74HC221AF
8-749-901-21 s IC BX1461
8-759-908-17 s IC TL082CPS
8-759-926-48 s IC SN74HC244NS
                                                                                                                                                              IC174
  IC116
                                                                                                                                                              IC175
                        8-759-925-82 s IC SN74HC21NS
8-759-925-85 s IC SN74HC32NS
8-759-925-85 s IC SN74HC32NS
8-759-925-82 s IC SN74HC21NS
8-759-925-74 s IC TC74HC04NS
                                                                                                                                                              IC176
   IC117
                                                                                                                                                              IC177
   IC118
                                                                                                                                                              IC178
   IC119
   IC120
                                                                                                                                                                                   8-759-926-03 s IC SN74HC113NS
8-759-710-29 s IC NJM2235M
8-759-710-62 s IC NJM2246M
8-759-710-29 s IC NJM2235M
8-759-710-62 s IC NJM2246M
                                                                                                                                                              IC179
   IC121
                                                                                                                                                              IC201
                         8-752-334-55 S IC CXD1175M
8-752-342-61 S IC CXD2105AQ
8-759-710-29 S IC NJM2235M
8-759-710-07 S IC NJM2234M
                                                                                                                                                              IC202
                                                                                                                                                              IC203
   IC123
                                                                                                                                                              IC204
   IC124
   IC125
                                                                                                                                                                                   8-759-710-07 s IC NJM2234M
8-759-711-32 s IC NJM2245M
8-759-710-29 s IC NJM2235M
8-759-710-62 s IC NJM2246M
                                                                                                                                                              TC205
                         8-759-987-27 s IC LM1881M
   IC126
                                                                                                                                                              IC206
                         8-759-111-69 s IC UPC1037HA
8-759-234-77 s IC TC4S66F
8-759-983-69 s IC LM358PS
8-759-925-90 s IC SN74HC74NS
8-759-239-58 s IC TC74HC221AF
                                                                                                                                                              IC207
   IC127
                                                                                                                                                              IC208
   IC128
                                                                                                                                                                                    8-759-710-07 s IC NJM2234M
                                                                                                                                                              IC209
   IC129
   IC130
                                                                                                                                                                                   8-759-711-32 s IC NJM2245M
8-759-710-07 s IC NJM2234M
8-759-711-32 s IC NJM2245M
8-759-925-74 s IC TC74HC04NS
8-759-926-99 s IC SN74HC4075NS
                                                                                                                                                              IC210
   IC131
                                                                                                                                                              ĬC211
                         8-759-926-07 s IC SN74HC132NS
8-759-710-29 s IC NJM2235M
8-759-980-04 s IC LM311PS
8-759-239-58 s IC TC74HC221AF
8-759-038-46 s IC TC7S00F-TE85L
                                                                                                                                                              IC212
   IC132
                                                                                                                                                              IC213
   IC133
                                                                                                                                                              IC214
   IC134
    IC135
                                                                                                                                                              IC215
                                                                                                                                                                                    8-759-926-99 s IC SN74HC4075NS
   IC136
                                                                                                                                                                                   8-759-925-85 s IC SN74HC32NS
8-759-925-82 s IC SN74HC21NS
8-759-925-85 s IC SN74HC32NS
8-759-925-85 s IC SN74HC32NS
                                                                                                                                                              IC216
                         8-759-603-54 s IC M51271FP
8-759-710-86 s IC NJM2233BM-T1
8-759-710-86 s IC NJM2233BM-T1
8-759-926-07 s IC SN74HC132NS
8-759-980-04 s IC LM311PS
                                                                                                                                                              IC217
   IC137
                                                                                                                                                              IC218
   IC138
                                                                                                                                                              IC219
   IC139
    IC140
                                                                                                                                                                                    8-759-925-82 s IC SN74HC21NS
8-752-334-55 s IC CXD1175M
                                                                                                                                                              IC220
    IC141
                                                                                                                                                              IC222
                         8-759-710-62 s IC NJM2246M
8-759-711-32 s IC NJM2245M
8-759-711-32 s IC NJM2245M
8-752-334-55 s IC CXD1175M
8-752-334-55 s IC CXD1175M
                                                                                                                                                                                    8-752-342-61 s IC CXD2105AQ
8-759-710-29 s IC NJM2235M
8-759-710-07 s IC NJM2234M
   IC142
                                                                                                                                                              IC223
                                                                                                                                                              IC224
   IC143
IC144
                                                                                                                                                              IC225
    IC145
                                                                                                                                                                                   8-759-987-27 s IC LM1881M
8-759-111-69 s IC UPC1037HA
8-759-234-77 s IC TC4S66F
                                                                                                                                                              IC226
    IC146
                                                                                                                                                             IC227
IC228
   IC147
IC148
                          8-752-334-55 s IC CXD1175M
8-759-926-82 s IC SN74HC574ANS
                                                                                                                                                                                    8-759-983-69 s IC LM358PS
                                                                                                                                                              IC229
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(AD-76P	BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)
Ref. No.	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
IC230 IC231 IC232 IC233 IC234	8-759-925-90 s IC SN74HC74NS 8-759-239-58 s IC TC74HC221AF 8-759-926-07 s IC SN74HC132NS 8-759-710-29 s IC NJM2235M 8-759-980-04 s IC LM311PS	L104 1-408-789-21 s INDUCTOR CHIP 100UH L105 1-408-793-21 s INDUCTOR CHIP 220UH L111 1-408-797-11 s INDUCTOR CHIP 470UH L112 1-408-785-21 s INDUCTOR CHIP 47UH L113 1-408-782-11 s INDUCTOR CHIP 27UH
IC235 IC236 IC237 IC238 IC239	8-759-239-58 s IC TC74HC221AF 8-759-038-46 s IC TC7SOOF-TE85L 8-759-603-54 s IC M51271FP 8-759-710-86 s IC NJM2233BM-T1 8-759-710-86 s IC NJM2233BM-T1	L114 1-408-785-21 s INDUCTOR CHIP 47UH L115 1-408-782-11 s INDUCTOR CHIP 27UH L116 1-408-785-21 s INDUCTOR CHIP 47UH L117 1-408-785-21 s INDUCTOR CHIP 47UH L118 1-408-785-21 s INDUCTOR CHIP 47UH
IC240 IC241 IC242 IC243 IC244	8-759-926-07 s IC SN74HC132NS 8-759-980-04 s IC LM311PS 8-759-710-62 s IC NJM2246M 8-759-711-32 s IC NJM2245M 8-759-711-32 s IC NJM2245M	L121 1-408-785-21 S INDUCTOR CHIP 47UH L122 1-408-785-21 S INDUCTOR CHIP 47UH L123 1-408-785-21 S INDUCTOR CHIP 47UH L124 1-408-785-21 S INDUCTOR CHIP 47UH L125 1-408-785-21 S INDUCTOR CHIP 47UH
IC245 IC246 IC247 IC248 IC249	8-752-334-55 s IC CXD1175M 8-752-334-55 s IC CXD1175M 8-752-334-55 s IC CXD1175M 8-759-926-82 s IC SN74HC574ANS 8-759-926-82 s IC SN74HC574ANS	L126 1-408-785-21 s INDUCTOR CHIP 47UH L131 1-408-793-21 s INDUCTOR CHIP 220UH L132 1-408-765-21 s INDUCTOR, CHIP 1UH L201 1-408-789-21 s INDUCTOR CHIP 100UH L202 1-408-785-21 s INDUCTOR CHIP 47UH
IC250 IC251 IC252 IC253 IC254	8-759-926-82 s IC SN74HC574ANS 8-759-710-29 s IC NJM2235M 8-759-980-04 s IC LM311PS 8-759-987-27 s IC LM1881M 8-759-239-58 s IC TC74HC221AF	L203 1-408-785-21 S INDUCTOR CHIP 47UH L204 1-408-789-21 S INDUCTOR CHIP 100UH L205 1-408-793-21 S INDUCTOR CHIP 220UH L211 1-408-797-11 S INDUCTOR CHIP 47UH L212 1-408-785-21 S INDUCTOR CHIP 47UH
IC255 IC256 IC257 IC258 IC259	8-759-239-58 S IC TC74HC221AF 8-759-927-46 S IC SN74HC00NS 8-759-239-58 S IC TC74HC221AF 8-759-926-24 S IC SN74HC164NS 8-759-925-90 S IC SN74HC74NS	L213 1-408-782-11 S INDUCTOR CHIP 27UH L214 1-408-785-21 S INDUCTOR CHIP 47UH L215 1-408-782-11 S INDUCTOR CHIP 27UH L216 1-408-785-21 S INDUCTOR CHIP 47UH L217 1-408-785-21 S INDUCTOR CHIP 47UH
IC260 IC261 IC262 IC263 IC264	8-759-925-90 s IC SN74HC74NS 8-759-927-46 s IC SN74HC00NS 8-759-927-46 s IC SN74HC00NS 8-759-925-90 s IC SN74HC74NS 8-759-926-23 s IC SN74HC163NS	L218 1-408-785-21 s INDUCTOR CHIP 47UH L221 1-408-785-21 s INDUCTOR CHIP 47UH L222 1-408-785-21 s INDUCTOR CHIP 47UH L223 1-408-785-21 s INDUCTOR CHIP 47UH L224 1-408-785-21 s INDUCTOR CHIP 47UH
IC265 IC266 IC267 IC268 IC269	8-759-926-23 s IC SN74HC163NS 8-759-926-23 s IC SN74HC163NS 8-759-925-74 s IC TC74HC04NS 8-759-925-81 s IC SN74HC20ANS 8-759-927-46 s IC SN74HC00NS	L225 1-408-785-21 s INDUCTOR CHIP 47UH L226 1-408-785-21 s INDUCTOR CHIP 47UH L231 1-408-793-21 s INDUCTOR CHIP 220UH L232 1-408-765-21 s INDUCTOR, CHIP 1UH L301 1-408-789-21 s INDUCTOR CHIP 100UH
IC270 IC271	8-759-925-78 s IC SN74HC10NS 8-759-239-58 s IC TC74HC221AF	LV101 1-410-286-11 s INDUCTOR, VAR 1uH LV201 1-410-286-11 s INDUCTOR, VAR 1uH
IC272 IC273 IC274	8-759-926-29 s IC SN74HC175NS 8-759-926-24 s IC SN74HC164NS 8-759-927-46 s IC SN74HC00NS	PS1
IC275 IC276 IC277 IC278 IC279	8-759-239-58 s IC TC74HC221AF 8-749-901-21 s IC BX1461 8-759-908-17 s IC TL082CPS 8-759-926-48 s IC SN74HC244NS 8-759-926-03 s IC SN74HC113NS	Q101 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q102 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q103 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q104 8-729-116-64 s TRANSISTOR 2SK508-K51 Q105 8-729-216-22 s TRANSISTOR 2SA1162
IC301 IC302	8-759-702-08 s IC NJM360M 8-759-925-73 s IC SN74HC03NS	Q106 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q107 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L1 L2 L3	1-412-525-31 s INDUCTOR 10uH 1-412-525-31 s INDUCTOR 10uH 1-412-525-31 s INDUCTOR 10uH	Q108         8-729-120-28 s         TRANSISTOR 2SC1623-L5L6           Q111         8-729-120-28 s         TRANSISTOR 2SC1623-L5L6           Q112         8-729-120-28 s         TRANSISTOR 2SC1623-L5L6
L101 L102	1-408-789-21 s INDUCTOR CHIP 100UH 1-408-785-21 s INDUCTOR CHIP 47UH	0113 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 0114 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L103	1-408-785-21 s INDUCTOR CHIP 47UH	Q115 8-729-216-22 s TRANSISTOR 2SA1162





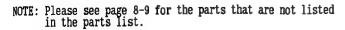
(AD-76P BOARD used for DFS-500P)	(AD-76P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
Q121 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q122 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q123 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q124 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q125 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q233       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q234       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q235       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q236       8-729-216-22 s       TRANSISTOR 2SA1162         Q237       8-729-216-22 s       TRANSISTOR 2SA1162
Q131 8-729-216-22 S TRANSISTOR 2SA1162 Q132 8-729-216-22 S TRANSISTOR 2SA1162 Q133 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q134 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q135 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q238       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q239       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q240       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q241       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q251       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6
Q136 8-729-216-22 s TRANSISTOR 2SA1162 Q137 8-729-216-22 s TRANSISTOR 2SA1162 Q138 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q139 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q140 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q252 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q253 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q254 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q255 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q256 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
Q141 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q151 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q152 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q153 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q154 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
Q155 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q156 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q157 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q158 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q159 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	
Q160 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q171 8-729-116-64 s TRANSISTOR 2SK508-K51 Q172 8-729-216-22 s TRANSISTOR 2SA1162 Q173 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q174 8-729-116-64 s TRANSISTOR 2SK508-K51	
Q175 8-729-216-22 S TRANSISTOR 2SA1162 Q176 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q177 8-729-116-64 S TRANSISTOR 2SK508-K51 Q178 8-729-216-22 S TRANSISTOR 2SA1162 Q179 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q292       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q293       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q301       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q302       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q303       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6
Q180 8-729-216-22 s TRANSISTOR 2SA1162 Q191 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q192 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q193 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q201 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q304 8-729-116-64 s TRANSISTOR 2SK508-K51 Q305 8-729-216-22 s TRANSISTOR 2SA1162 Q306 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q307 8-729-112-65 s TRANSISTOR 2SA1462-Y33
Q202 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q203 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q204 8-729-116-64 s TRANSISTOR 2SK508-K51 Q205 8-729-216-22 s TRANSISTOR 2SA1162 Q206 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	R1
Q207 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q208 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q211 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q212 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q213 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	R12 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
Q214 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q215 8-729-216-22 s TRANSISTOR 2SA1162 Q221 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q222 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q223 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	R22 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R23 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R30 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R32 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R41 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
Q224 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q225 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q231 8-729-216-22 s TRANSISTOR 2SA1162 Q232 8-729-216-22 s TRANSISTOR 2SA1162	R42 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R47 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W R48 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W R49 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R105 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W

(AD-76P BOARD used for DFS-500P) (AD-76P BOARD used for DFS-500P) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R106 R304 R107 R305 R108 R306 R109 R308 R115 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-695-11 s METAL, CHIP 88K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R309 R116 R310 R117 R311 R118 R313 R119 R314 R125 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R315 R126 R316 R127 R318 R128 R319 R129 R320 R135 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22% 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22% 0.5% 1/10W 1-218-776-11 s METAL 1M 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W R324 R136 R325 R137 R327 R138 R328 R139 R330 R145 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-637-11 s METAL, CHIP 270 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R146 R336 R147 R337 R148 R338 R149 R339 R155 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-218-772-11 s METAL 680K 0.5% 1/10W R342 R346 R157 R349 R158 R350 R159 R356 R205 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-681-11 s METAL, CHIP 18K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W R357 R206 R359 R207 R361 R208 R362 R209 R365 R215 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W R366 R216 R368 R217 R369 R218 R370 R219 R372 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R373 R227 R384 R389 R228 R402 R229 R404 R235 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-611-11 s METAL, CHIP 22 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15% 0.5% 1/10W R405 R236 R406 R237 R408 R238 R409 R239 R410 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W R411 R246 R413 R247 R414 R248 R415 R249 R416 R255 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-623-11 s METAL, CHIP 58 0.5% 1/10W 1-216-603-11 s METAL, CHIP 10 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R418 R256 R419 R257 R420 R258 R424 R259



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(AD-76P BOARD used for DFS-500P)
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                                                                                                                                                                                                                                                                  Ref. No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                  or Q'ty Part No.
                                                                                                                                                                                                                                                                                                                                                       SP Description
                                                                                     SP Description
                                    1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-776-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-227-11 s METAL GUID 276/2007
                                                                                                                                                                                                                                                                                                      1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-776-11 s METAL IM 0.5% 1/10W
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 R425
R427
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  R428
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  R430
                                       1-216-637-11 s METAL, CHIP 270 0.5% 1/10W
                                                                                                                                                                                                                                                                   R584
                                                                                                                                                                                                                                                                                                        1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
  R431
                                                                                                                                                                                                                                                                                                      1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
                                    1-216-663-11 S METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 S METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 S METAL, CHIP 220 0.5% 1/10W 1-216-635-11 S METAL, CHIP 220 0.5% 1/10W 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W
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  R436
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 R437
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  R438
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  R439
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  R442
                                      1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-218-772-11 s METAL 680K 0.5% 1/10W
                                                                                                                                                                                                                                                                                                       1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                                                                                                                                                    R606
  R446
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  R449
  R450
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  R456
                                       1-216-681-11 s METAL, CHIP 18K 0.5% 1/10W
                                                                                                                                                                                                                                                                   R615
  R457
                                       1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W
                                                                                                                                                                                                                                                                                                       1-216-609-11 s METAL, CHIP 18 0.5% 1/10W 1-216-634-11 s METAL, CHIP 200 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
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   R459
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   R461
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   R462
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  R465
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   R466
                                       1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
                                                                                                                                                                                                                                                                                                        1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-653-11 s METAL, CHIP 1.2K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82K 0.5% 1/10W
                                                                                                                                                                                                                                                                    R626
   R469
  R470
R472
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   R473
                                       1-216-679-11 s METAL, CHIP 15% 0.5% 1/10W 1-216-697-11 s METAL, CHIP 82% 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
                                                                                                                                                                                                                                                                                                        1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-768-11 s METAL 470K 0.5% 1/10W 1-216-619-11 s METAL, CHIP 47 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W
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   R484
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   R489
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   R501
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   R502
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   R506
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                                        1-218-760-11 s METAL 220K 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
1-216-609-11 s METAL, CHIP 18 0.5% 1/10W
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    R510
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    R513
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    R514
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    R515
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    R516
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                                         1-216-634-11 s METAL, CHIP 200 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1
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     R518
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    R522
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    R523
                                          1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W
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     R524
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                                          1-216-653-11 s METAL, CHIP 1.2% 0.5% 1/10W
1-216-687-11 s METAL, CHIP 33% 0.5% 1/10W
1-216-689-11 s METAL, CHIP 39% 0.5% 1/10W
1-216-697-11 s METAL, CHIP 82% 0.5% 1/10W
1-216-673-11 s METAL, CHIP 8.2% 0.5% 1/10W
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     R526
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    R531
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     R532
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     R534
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     R540
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                                          1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-218-768-11 s METAL 470K 0.5% 1/10W 1-216-619-11 s METAL, CHIP 47 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W
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     R541
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     R543
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     R544
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     R545
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                                          1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
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     R547
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     R548
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     R550
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     R552
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     R553
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                                          1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
                                                                                                                                                                                                                                                                    R720
     R558
    R560
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    R563
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     R566
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(AD-76P BOARD used for DFS-500P) (AD-76P BOARD used for DFS-500P) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-633-11 s METAL, CHIP 220 0.5% 1/10W 1-216-633-11 s METAL, CHIP 180 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R740 R743 R859 R861 R866 R745 R867 R747 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W **R868** R749 R751 R869 R752 R753 R870 R871 R872 R754 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-601-11 s METAL, CHIP 247K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8% 0.5% 1/10W R873 R755 R756 R875 R886 R757 R887 R758 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R888 R759 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W RARG R766 R890 R767 R891 R892 R768 **R893** R769 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W R895 R770 R898 R771 R904 R772 R773 R905 R775 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-218-772-11 s METAL 680K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R786 R917 R919 R920 R787 **R788** R789 R921 R790 R924 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W R791 R925 R792 R936 R937 R793 R941 R795 R942 **R798** 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R944 R802 R949 R804 R950 R805 R951 **R806** R952 R807 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-633-11 s METAL, CHIP 180 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W R953 R811 R954 R814 R955 R820 R956 R823 R825 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-633-11 s METAL, CHIP 180 0.5% 1/10W 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W R958 R827 R1013 R829 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-218-772-11 s METAL 680K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W R1017 R840 R843 R1019 R1020 R845 1-216-689-11 s METAL, CHIP 39K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-685-11 s METAL, CHIP 27K 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-218-754-11 s METAL, CHIP 120K 0.50% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R1021 R847 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-643-11 s METAL, CHIP 220 0.5% 1/10W R1024 R849 R851 R1025 R1036 R852 R1037 R853 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-679-11 s METAL, CHIP 15K 0.5% 1/10W 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W 1-218-760-11 s METAL 220K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R1041 R854 R1042 R855 R1043 R856 R1044 R857





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CN-573 BOARD
(AD-76P BOARD used for DFS-500P)
                                                                                                                                                                   Ref. No. or Q'ty Part No.
Ref. No.
                                                                                                                                                                                                                         SP Description
or Q'ty Part No.
                                                       SP Description
                                                                                                                                                                                          A-8271-681-A O MOUNTED CIRCUIT BOARD, CN-573
3-178-137-01 O BRACKET, D-SUB
3-673-910-21 O SCREW, CONNECTOR
4-876-607-21 O COLLAR (E), PLATE, JACK
7-682-547-04 S SCREW +B 3X6
                       1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
R1049
R1050
                                                                                                                                                                    1pc
                                                                                                                                                                    4pcs
R1051
                                                                                                                                                                    2pcs
R1052
                                                                                                                                                                    3pcs
R1053
                       1-218-760-11 s METAL 220K 0.5% 1/10W 1-218-764-11 s METAL 330K 0.5% 1/10W
                                                                                                                                                                                           1-124-144-00 s ELECT 220uF 20% 16V
R1054
                                                                                                                                                                                           1-124-144-00 s ELECT 220uF 20% 16V
                                                                                                                                                                    C2
R1055
                       1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
1-216-635-11 s METAL, CHIP 220 0.5% 1/10W
1-216-623-11 s METAL, CHIP 68 0.5% 1/10W
R1056
                                                                                                                                                                                          1-573-580-11 s CONNECTOR, BNC, FEMALE
1-573-580-11 s CONNECTOR, BNC, FEMALE
1-691-274-11 s CONNECTOR, BNC, FEMALE
1-695-807-11 s CONNECTOR, 2-BNC, FEMALE
1-695-807-11 s CONNECTOR, 2-BNC, FEMALE
 R1057
                                                                                                                                                                    CN4
 R1058
                                                                                                                                                                    CN6
                        1-231-385-00 s RESISTOR BLOCK 4.7Kx8
                                                                                                                                                                    CN7
 RR1
                                                                                                                                                                    CN9
 RB2
 RB3
                                                                                                                                                                                           1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE
1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE
                                                                                                                                                                     CN11
 RB101
                                                                                                                                                                    CN12
 RB102
                                                                                                                                                                     CN13
                         1-231-385-00 s RESISTOR BLOCK 4.7Kx8
                                                                                                                                                                     CN14
 RB103
                                                                                                                                                                     CN15
                        1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
1-228-990-00 s RES, ADJ METAL 1K
 RV101
                                                                                                                                                                                           1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE 1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE 1-573-589-11 s CONNECTOR, CIRCULAR 12P, MALE 1-568-676-11 o CONNECTOR, D-SUB 9P, FEMALE 1-568-677-11 o CONNECTOR, D-SUB 25PM, FEMALE
                                                                                                                                                                     CN16
  RV102
                                                                                                                                                                     CN17
  RV103
                                                                                                                                                                     CN18
  RV111
                                                                                                                                                                     CN21
  RV112
                                                                                                                                                                     CN22
  RV113
                         1-228-993-00 s RES, ADJ METAL 4.7K
                                                                                                                                                                                            1-573-580-11 s CONNECTOR, BNC, FEMALE
                         1-228-989-00 s RES, ADJ METAL 470
1-228-989-00 s RES, ADJ METAL 470
1-228-990-00 s RES, ADJ METAL 1K
1-230-504-11 s RES, ADJ METAL 220
                                                                                                                                                                     CN23
  RV114
                                                                                                                                                                     CN25
  RV115
                                                                                                                                                                     CN27
  RV116
                                                                                                                                                                     CN29
  RV-117
                                                                                                                                                                     CN31
                          1-228-989-00 s RES, ADJ METAL 470
  RV118
                                                                                                                                                                                            1-691-274-11 s CONNECTOR, BNC, FEMALE
1-695-807-11 s CONNECTOR, 2-BNC, FEMALE
1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE
1-573-590-12 s CONNECTOR, CIRCULAR 4P, FEMALE
1-573-592-11 s CONNECTOR, CIRCULAR 12P, FEMALE
                         1-228-989-00 S RES, ADJ METAL 470
                                                                                                                                                                     CN33
  RV119
                                                                                                                                                                     CN34
   RV121
                                                                                                                                                                      CN36
   RV122
                                                                                                                                                                      CN37
   RV123
                                                                                                                                                                      CN38
                          1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-994-00 s RES, ADJ METAL 10K
1-230-504-11 s RES, ADJ METAL 220
   RV131
                                                                                                                                                                                            1-573-592-11 s CONNECTOR, CIRCULAR 12P, FEMALE 1-506-482-11 s CONNECTOR 3P, MALE
                                                                                                                                                                      CN39
   RV 201
                                                                                                                                                                     CN40
   RV 202
   RV 203
                                                                                                                                                                                            1-412-525-31 s INDUCTOR 10uH
1-412-525-31 s INDUCTOR 10uH
   RV 211
                                                                                                                                                                      L2
                           1-228-990-00 s RES, ADJ METAL 1K
                          1-228-993-00 s RES, ADJ METAL 4.7K

1-228-989-00 s RES, ADJ METAL 470

1-228-989-00 s RES, ADJ METAL 470

1-228-990-00 s RES, ADJ METAL 470

1-228-990-00 s RES, ADJ METAL 1K
                                                                                                                                                                                            1-215-394-00 s METAL 75 1% 1/6W
1-215-394-00 s METAL 75 1% 1/6W
1-215-394-00 s METAL 75 1% 1/6W
                                                                                                                                                                      R1
   RV213
                                                                                                                                                                      R2
   RV 214
                                                                                                                                                                     R3
   RV 215
   RV216
                                                                                                                                                                                            1-570-157-51 s SWITCH, SLIDE
1-570-157-51 s SWITCH, SLIDE
                           1-230-504-11 s RES, ADJ METAL 220
1-228-989-00 s RES, ADJ METAL 470
                                                                                                                                                                      S<sub>2</sub>
    RV 217
                                                                                                                                                                                             1-570-157-51 s SWITCH, SLIDE
    RV218
   RV 219
   RV 221
   RV 222
                           1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
1-237-503-21 s RES, ADJ METAL 10K
1-228-990-00 s RES, ADJ METAL 1K
   RV 223
   RV 231
    RV301
    RV302
                           1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
1-570-514-11 s SWITCH, SLIDE
    S2
    S3
                            1-570-514-11 s SWITCH, SLIDE
                           1-577-295-11 s VCO, CRYSTAL 17.734475MHz
1-577-259-11 s CRYSTAL 17.734476 MHz
1-577-295-11 s VCO, CRYSTAL 17.734475MHz
1-577-259-11 s CRYSTAL 17.734476 MHz
    X101
    X102
    X201
    X202
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DA-63 BOARD used for DFS-500	(DA-63 BOARD used for DFS-500)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc A-8271-680-A O MOUNTED CIRCUIT BOARD, DA-63 6pcs 2-280-622-21 O SUPPORT (M3X10), HEXAGON 2pcs 3-166-184-01 O LEVER, PC BOARD 2pcs 3-166-185-01 s NUT, PLATE 1pc 3-178-157-01 O PLATE, SHIELD	C130 1-124-589-11 s ELECT 47uF 20% 16V C131 1-124-589-11 s ELECT 47uF 20% 16V C132 1-124-589-11 s ELECT 47uF 20% 16V C201 1-124-589-11 s ELECT 47uF 20% 16V C203 1-124-589-11 s ELECT 47uF 20% 16V
8pcs 4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6 2pcs 7-622-207-05 s N 2.6, TYPE 2 2pcs 7-626-320-11 s PIN, SPRING 3X8 6pcs 7-628-254-40 s SCREW +PS 2.6X12 12pcs 7-682-947-01 s ELECT 47uF 20X 16V C3 1-124-589-11 s ELECT 47uF 20X 16V C5 1-124-589-11 s ELECT 47uF 20X 16V C7 1-124-589-11 s ELECT 47uF 20X 16V C9 1-124-589-11 s ELECT 47uF 20X 16V	C205 1-124-589-11 s ELECT 47uF 20% 16V C207 1-124-589-11 s ELECT 47uF 20% 16V C209 1-124-589-11 s ELECT 47uF 20% 16V C215 1-124-589-11 s ELECT 47uF 20% 16V C217 1-124-589-11 s ELECT 47uF 20% 16V
C1 1-124-589-11 S ELECT 47uF 20% 16V C3 1-124-589-11 S ELECT 47uF 20% 16V C5 1-124-589-11 S ELECT 47uF 20% 16V C7 1-124-589-11 S ELECT 47uF 20% 16V C9 1-124-589-11 S ELECT 47uF 20% 16V	C219 1-124-589-11 S ELECT 47uF 20% 16V C221 1-124-589-11 S ELECT 47uF 20% 16V C223 1-124-589-11 S ELECT 47uF 20% 16V C225 1-124-589-11 S ELECT 47uF 20% 16V C227 1-124-589-11 S ELECT 47uF 20% 16V
C11 1-124-589-11 s ELECT 47uF 20% 16V	C229 1-124-589-11 s ELECT 47uF 20% 16V
C13 1-124-589-11 s ELECT 47uF 20% 16V	C301 1-124-589-11 s ELECT 47uF 20% 16V
C15 1-124-589-11 s ELECT 47uF 20% 16V	C303 1-124-589-11 s ELECT 47uF 20% 16V
C17 1-124-589-11 s ELECT 47uF 20% 16V	C306 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V
C19 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V	C307 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V
C20 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V	C309 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V
C23 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C314 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C25 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C318 1-124-282-00 s ELECT, NONPOLAR 22UF 20% 25V
C26 1-124-589-11 s ELECT 47uF 20% 16V	C319 1-124-282-00 s ELECT, NONPOLAR 22UF 20% 25V
C28 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C320 1-124-589-11 s ELECT 47uF 20% 16V
C29 1-124-589-11 s ELECT 47uF 20% 16V C31 1-131-341-00 s TANTALUM 0.1uF 10% 35V C32 1-124-589-11 s ELECT 47uF 20% 16V C34 1-124-589-11 s ELECT 47uF 20% 16V C36 1-124-589-11 s ELECT 47uF 20% 16V	C322 1-124-589-11 S ELECT 47uF 20% 16V C324 1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V C325 1-124-589-11 S ELECT 47uF 20% 16V C347 1-124-589-11 S ELECT 47uF 20% 16V C350 1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V
C39 1-164-232-11 s CERAMIC 0.01uF 10% 100V	C401 1-124-589-11 s ELECT 47uF 20% 16V
C40 1-124-589-11 s ELECT 47uF 20% 16V	C403 1-124-589-11 s ELECT 47uF 20% 16V
C43 1-124-589-11 s ELECT 47uF 20% 16V	C405 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C45 1-124-589-11 s ELECT 47uF 20% 16V	C406 1-131-374-00 s TANTALUM 33uF 10% 16V
C47 1-124-589-11 s ELECT 47uF 20% 16V	C407 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C50 1-163-235-11 S CERAMIC, CHIP 22PF 5% 50V C51 1-124-589-11 S ELECT 47UF 20% 16V C53 1-131-345-00 S TANTALUM 0.47UF 10% 35V C54 1-131-351-00 S TANTALUM 4.7UF 10% 35V C55 1-124-589-11 E ELECT 47UF 20% 16V	
C57 1-124-589-11 s ELECT 47uF 20% 16V	C426 1-124-589-11 s ELECT 47uF 20% 16V
C59 1-124-589-11 s ELECT 47uF 20% 16V	C430 1-163-224-11 s CERAMIC 7PF 0.25PF 50V
C62 1-164-232-11 s CERAMIC 0.01uF 10% 100V	C431 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V
C65 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C432 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C66 1-124-589-11 s ELECT 47uF 20% 16V	C433 1-124-589-11 s ELECT 47uF 20% 16V
C69 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C435 1-124-589-11 S ELECT 47UF 20% 16V
C70 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C437 1-124-589-11 S ELECT 47UF 20% 16V
C71 1-124-589-11 s ELECT 47uF 20% 16V	C439 1-124-589-11 S ELECT 47UF 20% 16V
C77 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C501 1-124-589-11 S ELECT 47UF 20% 16V
C78 1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V	C503 1-124-589-11 S ELECT 47UF 20% 16V
C80 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C505 1-124-589-11 s ELECT 47uF 20% 16V
C85 1-124-589-11 s ELECT 47uF 20% 16V	C507 1-124-589-11 s ELECT 47uF 20% 16V
C86 1-124-589-11 s ELECT 47uF 20% 16V	C509 1-124-589-11 s ELECT 47uF 20% 16V
C87 1-124-589-11 s ELECT 47uF 20% 16V	C511 1-124-589-11 s ELECT 47uF 20% 16V
C88 1-124-589-11 s ELECT 47uF 20% 16V	C513 1-124-589-11 s ELECT 47uF 20% 16V
C101 1-124-589-11 s ELECT 47uF 20% 16V	C515 1-124-589-11 s ELECT 47uF 20% 16V
C103 1-124-589-11 s ELECT 47uF 20% 16V	C517 1-124-589-11 s ELECT 47uF 20% 16V
C107 1-124-589-11 s ELECT 47uF 20% 16V	C519 1-124-589-11 s ELECT 47uF 20% 16V
C124 1-124-589-11 s ELECT 47uF 20% 16V	C521 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V



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(DA-63 BOARD used for DFS-500)
(DA-63 BOARD used for DFS-500)
                                                                                                                                                                              Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                  SP Description
                                                         SP Description
                         1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V

1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V

1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
                                                                                                                                                                                                        1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-580-097-11 s CONNECTOR, PICL-S 50P, MALE
1-580-097-11 s CONNECTOR, PICL-S 50P, MALE
                                                                                                                                                                               CN3
C525
                                                                                                                                                                               CN40
C527
                                                                                                                                                                               CN50
C529
 C530
                                                                                                                                                                                                        8-719-104-34 s DIODE 1S2835
8-719-800-76 s DIODE 1SS226
8-719-800-76 s DIODE 1SS226
8-719-800-60 s LED TLR214, RED
                                                                                                                                                                               D2
                         1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
                                                                                                                                                                               D3
 C534
                                                                                                                                                                               D4
 C535
 C537
                                                                                                                                                                                                        1-415-339-00 s DELAY LINE 300NS
1-415-502-11 s DELAY LINE 100NS
1-415-502-11 s DELAY LINE 100NS
                                                                                                                                                                               DL501
 C539
                                                                                                                                                                               DL503
 C543
                                                                                                                                                                               DL504
                          1-163-087-00 S CERAMIC, CHIP 4PF 50V

1-163-224-11 S CERAMIC 7PF 0.25PF 50V

1-163-224-11 S CERAMIC 7PF 0.25PF 50V

1-163-227-11 S CERAMIC, CHIP 10PF 5% 50V

1-124-589-11 S ELECT 47uF 20% 16V
C544
C545
C546
                                                                                                                                                                                                        1-235-161-00 s FILTER, BANDPASS 3.58MHz
1-235-786-11 s FILTER, LOW-PASS
1-235-584-11 s FILTER, LOW-PASS
1-235-161-00 s FILTER, BANDPASS 3.58MHz
1-239-085-11 s FILTER, LOW-PASS
                                                                                                                                                                                FL301
                                                                                                                                                                                FL302
  C547
                                                                                                                                                                                FL401
                                                                                                                                                                                FL501
                           1-124-589-11 s ELECT 470F 20% 16V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
 C551
                                                                                                                                                                                                        1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-161-00 s FILTER, BANDPASS 3.58MHz
                                                                                                                                                                               FL502
  C553
                                                                                                                                                                               FL503
FL504
 C554
  C560
                                                                                                                                                                                FL505
  C561
                           1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V

1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                         8-759-520-06 s IC NJM7809FA
  C563
                                                                                                                                                                                                        8-759-700-68 s IC NJM79L09A
8-759-231-53 s IC TA7805S
8-741-104-00 s IC BX1040
8-759-101-12 s IC UPC311G2
                                                                                                                                                                                IC2
  C565
                                                                                                                                                                                IC3
  C567
                                                                                                                                                                                IC4
IC5
  C573
  C574
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                         8-752-335-47 s IC CXD1216M
8-741-129-10 s IC BX-1291
8-752-332-67 s IC CXD1217M
1-808-513-12 s IC IB-38
  C575
                                                                                                                                                                                 IC7
  C577
                                                                                                                                                                                 IC8
  C579
                                                                                                                                                                                 TC9
  C584
                                                                                                                                                                                                          8-759-925-72 s IC SN74HC02NS
                                                                                                                                                                                 IC10
  C585
                                                                                                                                                                                                         8-759-948-28 s IC SM5828P
8-759-907-81 s IC SM74LS221NS
8-759-907-81 s IC SM74LS221NS
8-759-926-82 s IC SM74HC574ANS
8-759-926-82 s IC SM74HC574ANS
                            1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
  C586
                                                                                                                                                                                IC12
IC13
  C587
  C589
                                                                                                                                                                                 IC14
  C590
                                                                                                                                                                                 IC15
                             1-124-589-11 S ELECT 47uF 20% 16V
  C592
                                                                                                                                                                                                         8-759-926-82 s IC SN74HC574ANS
8-759-209-20 s IC TC4584BF
8-759-209-20 s IC TC4584BF
8-759-989-56 s IC SN74ALS244BNS
8-759-300-71 s IC HD14053BFP
                            1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                                 IC16
   C594
                                                                                                                                                                                 IC17
   C599
                                                                                                                                                                                 IC18
   C601
                                                                                                                                                                                 IC19
   C605
                                                                                                                                                                                 IC20
   C606
                                                                                                                                                                                                         8-759-063-39 s IC CXD8267Q
8-759-063-39 s IC CXD8267Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
                            1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                                 IC101
   C608
                                                                                                                                                                                 IC102
   C610
                                                                                                                                                                                 IC103
   C614
                                                                                                                                                                                  IC104
   C616
                                                                                                                                                                                 IC105
   C624
                            1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V

1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

1-164-232-11 s CERAMIC 0.01uF 10% 100V

1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                                                         8-759-926-82 s IC SN74HC574ANS
                                                                                                                                                                                 IC108
   C630
                                                                                                                                                                                 IC109
   C631
                                                                                                                                                                                 IC110
IC111
   C633
   C635
                                                                                                                                                                                 IC112
   C637
                                                                                                                                                                                                         8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-505-01 s IC CXD8054
8-759-926-82 s IC SN74HC574ANS
                             1-124-589-11 S ELECT 47UF 20% 16V
1-163-243-11 S CERAMIC, CHIP 47PF 5% 50V
1-164-232-11 S CERAMIC 0.01UF 10% 100V
1-163-099-00 S CERAMIC, CHIP 18PF 5% 50V
1-163-243-11 S CERAMIC, CHIP 47PF 5% 50V
                                                                                                                                                                                 IC114
   C639
                                                                                                                                                                                IC115
IC116
   C643
   C646
                                                                                                                                                                                 IC117
   C650
                                                                                                                                                                                 IC118
   C658
                                                                                                                                                                                                      8-759-926-82 s IC SN74HC574ANS
8-759-982-25 s IC RC78L09A
8-759-708-05 s IC NJM78L05A
8-759-515-12 s IC SN74ALS574BNS
                                                                                                                                                                                 IC119
                             1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
   C659
                                                                                                                                                                                 IC201
                             1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE
                                                                                                                                                                                 IC202
   CN1
   CN<sub>2</sub>
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(DA-63 BOARD used for DFS-500)	(DA-63 BOARD used for DFS-500)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
IC204 8-759-515-12 S IC SN74ALS574BNS IC205 8-759-515-12 S IC SN74ALS574BNS IC206 8-759-515-12 S IC SN74ALS574BNS IC207 8-752-032-93 S IC CXA1260Q-Z IC208 8-752-032-96 S IC CXA1106M	L12 1-410-470-11 s INDUCTOR 10uH L13 1-410-470-11 s INDUCTOR 10uH L14 1-412-525-31 s INDUCTOR 10uH L15 1-412-525-31 s INDUCTOR 10uH L101 1-412-525-31 s INDUCTOR 10uH
IC401 8-759-906-59 s IC CX22017 IC402 8-759-702-07 s IC NJM13700M IC501 8-759-520-06 s IC NJM7809FA IC502 8-759-701-87 s IC NJM7909FA IC503 8-759-231-53 s IC TA7805S	L202 1-410-470-11 s INDUCTOR 10uH L203 1-410-470-11 s INDUCTOR 10uH L204 1-410-470-11 s INDUCTOR 10uH L205 1-410-470-11 s INDUCTOR 10uH L206 1-410-470-11 s INDUCTOR 10uH
IC504 8-759-701-84 S IC NJM7905FA IC505 8-759-984-88 S IC LM6361M IC506 8-759-984-88 S IC LM6361M IC507 8-759-984-88 S IC LM6361M IC508 8-759-702-07 S IC NJM13700M	L207 1-410-470-11 s INDUCTOR 10uH L301 1-410-470-11 s INDUCTOR 10uH L302 1-410-470-11 s INDUCTOR 10uH L303 1-408-418-00 s INDUCTOR 56uH L401 1-410-470-11 s INDUCTOR 10uH
IC509 8-741-135-60 s IC BX1356 IC510 8-741-135-60 s IC BX1356 IC511 8-741-135-60 s IC BX1356 IC512 8-759-984-88 s IC LM6361M IC513 8-759-984-88 s IC LM6361M	L402 1-408-425-00 s INDUCTOR 220uH L403 1-410-470-11 s INDUCTOR 10uH L404 1-410-470-11 s INDUCTOR 10uH L501 1-410-470-11 s INDUCTOR 10uH L502 1-410-470-11 s INDUCTOR 10uH
IC514 8-759-906-59 S IC CX22017 IC516 8-759-702-07 S IC NJM13700M IC517 8-752-052-73 S IC CXA1451M IC518 8-759-984-88 S IC IM6361M IC519 8-752-052-73 S IC CXA1451M	L503 1-410-470-11 S INDUCTOR 10uH L504 1-410-470-11 S INDUCTOR 10uH L505 1-410-470-11 S INDUCTOR 10uH L506 1-408-425-00 S INDUCTOR 220uH L507 1-410-470-11 S INDUCTOR 10uH
IC520 8-759-984-88 s IC LM6361M IC521 8-759-702-07 s IC NJM13700M IC522 8-752-052-73 s IC CXA1451M IC523 8-759-984-88 s IC LM6361M IC524 8-752-052-73 s IC CXA1451M	L508 1-410-470-11 s INDUCTOR 10uH  PS1
IC525 8-759-702-07 s IC NJM13700M IC526 8-759-984-88 s IC LM6361M IC601 8-759-989-56 s IC SN74ALS244BNS IC602 8-759-989-56 s IC SN74ALS244BNS IC603 8-759-989-56 s IC SN74ALS244BNS	Q1 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q2 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q3 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q4 8-729-109-44 s TRANSISTOR 2SK94 Q5 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
JR1 1-216-295-00 s METAL, CHIP 0 JR3 1-216-295-00 s METAL, CHIP 0 JR5 1-216-295-00 s METAL, CHIP 0 JR7 1-216-295-00 s METAL, CHIP 0 JR9 1-216-295-00 s METAL, CHIP 0	Q6 8-729-175-73 s TRANSISTOR 2SC2757 Q7 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q8 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q9 8-729-109-44 s TRANSISTOR 2SK94 Q10 8-729-216-22 s TRANSISTOR 2SA1162
JR11 1-216-295-00 s METAL, CHIP 0 JR13 1-216-295-00 s METAL, CHIP 0 JR15 1-216-295-00 s METAL, CHIP 0 JR17 1-216-295-00 s METAL, CHIP 0 JR21 1-216-295-00 s METAL, CHIP 0	Q11 8-729-216-22 s TRANSISTOR 2SA1162 Q201 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q202 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q203 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q204 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
JR401 1-216-295-00 s METAL, CHIP 0 JR403 1-216-295-00 s METAL, CHIP 0	Q301 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q302 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L1 1-410-470-11 s INDUCTOR 10uH L2 1-410-470-11 s INDUCTOR 10uH L3 1-410-470-11 s INDUCTOR 10uH	Q303 8-729-175-73 s TRANSISTOR 2SC2757 Q304 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q305 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
1-408-413-00 s INDUCTOR 22uH L5 1-408-413-00 s INDUCTOR 22uH	Q306 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q307 8-729-216-22 s TRANSISTOR 2SA1162 Q308 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L6 1-410-470-11 s INDUCTOR 10uH L7 1-410-470-11 s INDUCTOR 10uH L8 1-410-470-11 s INDUCTOR 10uH	Q309 8-729-175-73 s TRANSISTOR 2SC2757 Q311 8-729-216-22 s TRANSISTOR 2SA1162 Q312 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
L9 1-410-470-11 s INDUCTOR 10uH L10 1-410-470-11 s INDUCTOR 10uH L11 1-410-470-11 s INDUCTOR 10uH	Q312 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q313 8-729-175-73 s TRANSISTOR 2SC2757 Q315 8-729-216-22 s TRANSISTOR 2SA1162 Q316 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
PIT T AIG TT O TIMOGRAM TAME	

DFS-500/5

(DA-63 BOARD used for DFS-500)	(DA-63 BOARD used for DFS-500)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
Q402 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q403 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q406 8-729-216-22 S TRANSISTOR 2SA1162 Q408 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q409 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q546 8-729-216-22 E TRANSISTOR 2SA1162 Q548 8-729-116-64 S TRANSISTOR 2SK508-K51 Q549 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q551 8-729-216-22 S TRANSISTOR 2SA1162 Q553 8-729-116-64 S TRANSISTOR 2SK508-K51
Q410 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q411 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q413 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q414 8-729-116-64 s TRANSISTOR 2SK508-K51 Q415 8-729-112-65 s TRANSISTOR 2SA1462-Y33	Q554       8-729-112-65 s       TRANSISTOR 2SA1462-Y33         Q556       8-729-216-22 s       TRANSISTOR 2SA1162         Q557       8-729-175-73 s       TRANSISTOR 2SC2757         Q558       8-729-216-22 s       TRANSISTOR 2SA1162         Q560       8-729-116-64 s       TRANSISTOR 2SK508-K51
Q416 8-729-112-65 S TRANSISTUR 2SA1462-Y33 Q417 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q418 8-729-175-73 S TRANSISTOR 2SC2757 Q419 8-729-175-73 S TRANSISTOR 2SC2757 Q420 8-729-175-73 S TRANSISTOR 2SC2757	Q563 8-729-112-65 \$ TRANSISTOR 2581462-133 Q564 8-729-175-73 \$ TRANSISTOR 2581162 Q565 8-729-16-22 \$ TRANSISTOR 2581162 Q567 8-729-116-64 \$ TRANSISTOR 258108-K51
Q421 8-729-175-73 s TRANSISTOR 2SC2757 Q422 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q423 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q424 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q425 8-729-216-22 s TRANSISTOR 2SA1162	Q568 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q572 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q573 8-729-216-22 S TRANSISTOR 2SA1162 Q574 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q577 8-729-175-73 S TRANSISTOR 2SC2757
Q426 8-729-216-22 s TRANSISTOR 2SA1162 Q427 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q578 8-729-216-22 s TRANSISTOR 2SA1162
Q428       8-729-120-28       \$ TRANSISTOR 2SC1623-L5L6         Q501       8-729-120-28       \$ TRANSISTOR 2SC1623-L5L6         Q502       8-729-120-28       \$ TRANSISTOR 2SC1623-L5L6	R2 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W R7 1-216-615-11 s METAL, CHIP 33 0.5% 1/10W R8 1-218-776-11 s METAL 1M 0.5% 1/10W R10 1-216-683-11 s METAL, CHIP 22K 0.5% 1/10W
Q503 8-729-216-22 S TRANSISTOR 2SA1162 Q506 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q507 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q508 8-729-216-22 S TRANSISTOR 2SA1162 Q512 8-729-216-22 S TRANSISTOR 2SA1162	R13 1-216-695-11 s METAL, CHIP 68K 0.5% 1/10W  R14 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W  R23 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W  R24 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W  R26 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W
Q425         8-729-216-22         s TRANSISTOR 2SA1162           Q426         8-729-120-28         s TRANSISTOR 2SA1162           Q427         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q428         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q501         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q502         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q503         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q506         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q507         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q512         8-729-216-22         s TRANSISTOR 2SA1162           Q512         8-729-216-22         s TRANSISTOR 2SA1162           Q515         8-729-116-22         s TRANSISTOR 2SC1623-L5L6           Q516         8-729-116-64         s TRANSISTOR 2SC1623-L5L6           Q517         8-729-112-65         s TRANSISTOR 2SC1623-L5L6           Q518         8-729-175-73         s TRANSISTOR 2SC2757           Q520         8-729-175-73         s TRANSISTOR 2SC1623-L5L6           Q6521         8-729-120-28         s TRANSISTOR 2SC1623-L5L6           Q6522         8-729-120-28         s TRANSISTOR 2SC1623-L5L6	R27 1-216-649-11 S METAL, CHIP 820 0.5% 1/10W  R28 1-216-642-11 S METAL, CHIP 430 0.5% 1/10W  R31 1-216-663-11 S METAL, CHIP 3.3% 0.5% 1/10W  R36 1-216-687-11 S METAL, CHIP 33% 0.5% 1/10W  R38 1-216-623-11 S METAL, CHIP 68 0.5% 1/10W
Q519 8-729-175-73 S TRANSISTOR 2SC2757 Q520 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q521 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q522 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q523 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	R39 1-216-663-11 S METAL, CHIP 3.3K 0.5% 1/10W  R41 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W  R44 1-216-679-11 S METAL, CHIP 15K 0.5% 1/10W  R45 1-216-663-11 S METAL, CHIP 3.3K 0.5% 1/10W  R48 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W
Q524 8-729-216-22 s TRANSISTOR 2SA1162 Q525 8-729-216-22 s TRANSISTOR 2SA1162 Q526 8-729-175-73 s TRANSISTOR 2SC2757 Q527 8-729-175-73 s TRANSISTOR 2SC2757 Q528 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	R49 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W  R53 1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W  R208 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W  R209 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W  R210 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W
Q529 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q530 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q531 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q532 8-729-216-22 S TRANSISTOR 2SA1162 Q533 8-729-175-73 S TRANSISTOR 2SC2757	R211 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W R302 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R305 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R309 1-216-641-11 s METAL, CHIP 390 0.5% 1/10W R310 1-216-641-11 s METAL, CHIP 390 0.5% 1/10W
Q534 8-729-175-73 s TRANSISTOR 2SC2757 Q535 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q536 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q537 8-729-216-22 s TRANSISTOR 2SA1162 Q538 8-729-216-22 s TRANSISTOR 2SA1162	R312 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R313 1-216-661-11 s METAL, CHIP 2.7K 0.5% 1/10W R315 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R317 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R319 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
Q540 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q541 8-729-116-64 s TRANSISTOR 2SK508-K51 Q542 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q545 8-729-175-73 s TRANSISTOR 2SC2757	R320 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R328 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W R336 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W

(DA-63 BOARD used for DFS-500) (DA-63 BOARD used for DFS-500) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W R590 R339 R591 R406 R593 R407 R594 R408 R601 R418 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-673-11 S METAL, CHIP 8.2K 0.5% 1/10W 1-216-657-11 S METAL, CHIP 1.8K 0.5% 1/10W 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 S METAL, CHIP 5.6K 0.5% 1/10W 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W R605 R421 R606 R424 R425 R611 R616 R426 R617 R433 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2% 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-677-11 s METAL, CHIP 12K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R618 R434 R437 R621 R444 R445 R622 R628 R634 R446 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-216-635-11 s METAL, CHIP 220 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W R635 R447 R640 R449 R450 R641 R642 R451 R454 1-216-637-11 s METAL, CHIP 270 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R649 R457 R650 R458 R661 R459 R662 R460 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-309-00 s METAL, CHIP 5.6 5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W R663 R461 R672 R462 R684 R463 **R685** R464 1-215-394-00 s METAL 75 1% 1/6W R686 R465 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W 1-216-691-11 s METAL, CHIP 47K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-649-11 s METAL, CHIP 820 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W **R688** R502 R503 R692 R699 R515 R710 R519 R711 R520 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8% 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W R712 R532 R537 R714 R718 R539 R721 R547 R727 R548 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-661-11 s METAL, CHIP 2.7K 0.5% 1/10W 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W R730 R556 R732 R557 R739 R558 R740 R559 R741 R561 1-216-653-11 s METAL, CHIP 1.2K 0.5% 1/10W 1-216-671-11 s METAL, CHIP 6.8K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W **R743** R563 R747 R564 R750 R571 R573 R756 R574 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-687-11 s METAL, CHIP 33K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R761 R576 R768 R577 R578 R769 R770 R579 R581 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-216-649-11 s METAL, CHIP 820 0:5% 1/10W 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W **R583** 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W R778 R584 R779 R585 R588

NOTE: Please see page 8-9 for the parts that are not listed in the parts list.

DFS-500/50

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(DA-63 BOARD used for DFS-500)
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Ref. No. or Q'ty Part No.
                                               SP Description
                   1-215-394-00 s METAL 75 1% 1/6W
1-215-394-00 s METAL 75 1% 1/6W
1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
R781
R782
 R797
R798
R799
                    1-216-655-11 5 METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 5 METAL, CHIP 470 0.5% 1/10W
 R808
 R811
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB101
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB102
                     1-231-411-00 S RESISTOR BLOCK 100Kx8
1-231-411-00 S RESISTOR BLOCK 100Kx8
1-231-411-00 S RESISTOR BLOCK 100Kx8
 RB103
 RB104
 RB105
                     1-231-411-00 s RESISTOR BLOCK 100Rx8
1-231-411-00 s RESISTOR BLOCK 100Rx8
1-231-411-00 s RESISTOR BLOCK 100Rx8
 RB106
 RB107
 RB108
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB109
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB110
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB111
  RB112
  RB113
  RB114
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB115
                     1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB202
  RB203
  RB204
  RB205
  RV1
                      1-228-993-00 s RES, ADJ METAL 4.7K
                      1-220-995-00 S RES, ADJ METAL 10K
1-237-502-21 S RES, ADJ METAL 5K
1-228-995-00 S RES, ADJ METAL 22K
1-228-995-00 S RES, ADJ METAL 22K
  RV2
  RV3
  RV4
                      1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
1-228-994-00 s RES, ADJ METAL 10K
1-228-994-00 s RES, ADJ METAL 10K
  RV6
  RV7
  RV8
   RV9
   RV10
                       1-237-501-21 s RES, ADJ METAL 2K
   RV11
                       1-228-989-00 s RES, ADJ METAL 470
1-228-993-00 s RES, ADJ METAL 4.7K
1-237-500-21 s RES, ADJ METAL 1K
1-228-990-00 s RES, ADJ METAL 1K
   RV301
  RV402
RV404
RV406
                       1-228-993-00 s RES, ADJ METAL 4.7K
1-228-991-00 s RES, ADJ METAL 2.2K
   RV504
   RV506
                       1-237-500-21 s RES, ADJ METAL 1K
1-237-500-21 s RES, ADJ METAL 1K
1-237-500-21 s RES, ADJ METAL 1K
   RV507
   RV508
   RV509
                       1-228-993-00 s RES, ADJ METAL 4.7K
   RV511
                       1-228-991-00 s RES, ADJ METAL 2.2K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-989-00 s RES, ADJ METAL 470
1-237-501-21 s RES, ADJ METAL 2K
   RV512
   RV514
RV515
   RV516
                       1-228-990-00 s RES, ADJ METAL 1K
1-237-501-21 s RES, ADJ METAL 2K
1-228-989-00 s RES, ADJ METAL 470
1-237-501-21 s RES, ADJ METAL 2K
1-228-989-00 s RES, ADJ METAL 470
   RV518
   RV520
   RV521
RV522
   RV523
                       1-237-501-21 s RES, ADJ METAL 2K
1-228-990-00 s RES, ADJ METAL 1K
   RV524
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(DA-63 BOARD used for DFS-500)

Ref. No. or Q'ty	Part No. SP Description
RV526	1-228-989-00 s RES, ADJ METAL 470
\$1 \$2 \$3 \$101 \$102	1-570-373-12 s SWITCH, SLIDE 1-554-399-00 s SWITCH, TOGGLE 1-553-252-00 s SWITCH, DIGITAL 1-554-027-00 s SWITCH, DIGITAL 1-570-514-11 s SWITCH, SLIDE
S103	1-554-027-00 s SWITCH, DIGITAL
TH1	1-800-071-11 s THERMISTER, S-300
VC01 VC02	1-577-089-11 s VCO, CRYSTAL 14.318180MHz 1-577-089-11 s, VCO, CRYSTAL 14.318180MHz

DA-63P B	OARD used for DFS-500P	(DA-63P BOARD used for DFS-500P)
Ref. No. or Q'ty	Dart No. SD Description	Ref. No. or Q'ty Part No. SP Description
1pc	A-8271-692-A O MOUNTED CIRCUIT BOARD, DA-63P	C130 1-124-589-11 S ELECT 47uF 20% 16V
6pcs	2-280-622-21 O SUPPORT (M3X10), HEXAGON	C131 1-124-589-11 S ELECT 47uF 20% 16V
2pcs	3-166-184-01 O LEVER, PC BOARD	C132 1-124-589-11 S ELECT 47uF 20% 16V
2pcs	3-166-185-01 S NUT, PLATE	C201 1-124-589-11 S ELECT 47uF 20% 16V
1pc	3-178-157-01 O PLATE, SHIELD	C203 1-124-589-11 S ELECT 47uF 20% 16V
8pcs 2pcs 2pcs 6pcs 12pcs	7-622-207-05 s N 2.6, TYPE 2 7-626-320-11 s PIN, SPRING 3X8 7-628-254-40 s SCREW +PS 2.6X12 7-682-947-01 s SCREW +PSW 3X6	C205 1-124-589-11 S ELECT 47UF 20% 16V C207 1-124-589-11 S ELECT 47UF 20% 16V C209 1-124-589-11 S ELECT 47UF 20% 16V C215 1-124-589-11 S ELECT 47UF 20% 16V C217 1-124-589-11 S ELECT 47UF 20% 16V
C1	1-124-589-11 s ELECT 47uF 20% 16V	C219 1-124-589-11 s ELECT 47uF 20% 16V
C3	1-124-589-11 s ELECT 47uF 20% 16V	C221 1-124-589-11 s ELECT 47uF 20% 16V
C5	1-124-589-11 s ELECT 47uF 20% 16V	C223 1-124-589-11 s ELECT 47uF 20% 16V
C7	1-124-589-11 s ELECT 47uF 20% 16V	C225 1-124-589-11 s ELECT 47uF 20% 16V
C9	1-124-589-11 s ELECT 47uF 20% 16V	C227 1-124-589-11 s ELECT 47uF 20% 16V
C11	1-124-589-11 s ELECT 47uF 20% 16V	C229 1-124-589-11 s ELECT 47uF 20% 16V
C13	1-124-589-11 s ELECT 47uF 20% 16V	C301 1-124-589-11 s ELECT 47uF 20% 16V
C15	1-124-589-11 s ELECT 47uF 20% 16V	C303 1-124-589-11 s ELECT 47uF 20% 16V
C17	1-124-589-11 s ELECT 47uF 20% 16V	C306 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C19	1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V	C307 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C20	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V	C309 1-163-237-11 s CERAMIC, CHIP 27PF 5% 50V
C23	1-163-113-00 s CERAMIC, CHIP:68PF 5% 50V	C314 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C25	1-163-113-00 s CERAMIC, CHIP:68PF 5% 50V	C318 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
C26	1-124-589-11 s ELECT 47uF 20% 16V	C319 1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
C28	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C320 1-124-589-11 s ELECT 47uF 20% 16V
C29	1-124-589-11 s ELECT 47uF 20% 16V	C322 1-124-589-11 s ELECT 47uF 20% 16V
C31	1-131-341-00 s TANTALUM 0.1uF 10% 35V	C324 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C32	1-124-589-11 s ELECT 47uF 20% 16V	C325 1-124-589-11 s ELECT 47uF 20% 16V
C34	1-124-589-11 s ELECT 47uF 20% 16V	C347 1-124-589-11 s ELECT 47uF 20% 16V
C36	1-124-589-11 s ELECT 47uF 20% 16V	C350 1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
C39	1-164-232-11 s CERAMIC 0.01uF 10% 100V	C401 1-124-589-11 s ELECT 47uF 20% 16V
C40	1-124-589-11 s ELECT 47uF 20% 16V	C403 1-124-589-11 s ELECT 47uF 20% 16V
C43	1-124-589-11 s ELECT 47uF 20% 16V	C405 1-162-638-11 s CERAMIC, CHIP 1uF 16V
C45	1-124-589-11 s ELECT 47uF 20% 16V	C406 1-131-374-00 s TANTALUM 33uF 10% 16V
C47	1-124-589-11 s ELECT 47uF 20% 16V	C407 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C50 C51 C53 C54 C55	1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V 1-124-589-11 s ELECT 47uF 20% 16V	C411 1-162-638-11 s CERAMIC, CHIP 1uF 16V C412 1-131-374-00 s TANTALUM 33uF 10% 16V C413 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V C415 1-164-232-11 s CERAMIC 0.01uF 10% 100V C416 1-164-232-11 s CERAMIC 0.01uF 10% 100V
C57	1-124-589-11 s ELECT 47uF 20% 16V	C417 1-124-589-11 s ELECT 47uF 20% 16V
C59	1-124-589-11 s ELECT 47uF 20% 16V	C418 1-124-589-11 s ELECT 47uF 20% 16V
C62	1-164-232-11 s CERAMIC 0.01uF 10% 100V	C420 1-124-589-11 s ELECT 47uF 20% 16V
C65	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C424 1-124-589-11 s ELECT 47uF 20% 16V
C66	1-124-589-11 s ELECT 47uF 20% 16V	C426 1-124-589-11 s ELECT 47uF 20% 16V
C69	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C430 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C70	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C431 1-163-241-11 s CERAMIC, CHIP 39PF 5% 50V
C71	1-124-589-11 s ELECT 47uF 20% 16V	C432 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
C77	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C433 1-124-589-11 s ELECT 47uF 20% 16V
C78	1-163-121-00 s CERAMIC, CHIP 150PF 5% 50V	C435 1-124-589-11 s ELECT 47uF 20% 16V
C80	1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V	C437 1-124-589-11 s ELECT 47uF 20% 16V
C85	1-124-589-11 s ELECT 47uF 20% 16V	C439 1-124-589-11 s ELECT 47uF 20% 16V
C86	1-124-589-11 s ELECT 47uF 20% 16V	C501 1-124-589-11 s ELECT 47uF 20% 16V
C87	1-124-589-11 s ELECT 47uF 20% 16V	C503 1-124-589-11 s ELECT 47uF 20% 16V
C88	1-124-589-11 s ELECT 47uF 20% 16V	C505 1-124-589-11 s ELECT 47uF 20% 16V
C101	1-124-589-11 s ELECT 47uF 20% 16V	C507 1-124-589-11 s ELECT 47uF 20% 16V
C103	1-124-589-11 s ELECT 47uF 20% 16V	C509 1-124-589-11 s ELECT 47uF 20% 16V
C107	1-124-589-11 s ELECT 47uF 20% 16V	C511 1-124-589-11 s ELECT 47uF 20% 16V
C124	1-124-589-11 s ELECT 47uF 20% 16V	C513 1-124-589-11 s ELECT 47uF 20% 16V



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(DA-63P BOARD used for DFS-500P)
(DA-63P BOARD used for DFS-500P)
                                                                                                                                                                               Ref. No.
or Q'ty Part No.
Ref. No.
                                                                                                                                                                                                                                         SP Description
or Q'ty Part No. SP Description
                                                                                                                                                                                                        1-163-099-00 s CERAMIC, CHIP 18PF 5% 50V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
                        1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

1-124-589-11 s ELECT 47uF 20% 16V

1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V

1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                                C650
                                                                                                                                                                                C658
C517
                                                                                                                                                                                C659
 C519
C521
                                                                                                                                                                                                        1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-506-748-11 0 CONNECTOR, DIN 96P, MALE
1-580-097-11 s CONNECTOR, PICL-S 50P, MALE
1-580-097-11 s CONNECTOR, PICL-S 50P, MALE
                                                                                                                                                                                CN1
 C525
                                                                                                                                                                                CN2
                         1-124-589-11 s ELECT 47UF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22UF 20% 25V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-124-282-00 s ELECT, NONPOLAR 22UF 20% 25V
                                                                                                                                                                                CN3
 C527
                                                                                                                                                                                CN40
 C529
                                                                                                                                                                                CN50
 C530
 C533
                                                                                                                                                                                                         8-719-104-34 $ DIODE 1S2835
8-719-800-76 $ DIODE 1SS226
8-719-800-76 $ DIODE 1SS226
 C534
                                                                                                                                                                                D2
                         1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-222-11 s CERAMIC, CHIP 5PF 50V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
                                                                                                                                                                                D3
 C535
                                                                                                                                                                                                          8-719-800-60 s LED TLR214, RED
                                                                                                                                                                                D4
 C537
 C539
                                                                                                                                                                                                         1-415-339-00 s DELAY LINE 300nS
1-415-502-11 s DELAY LINE 100nS
1-415-502-11 s DELAY LINE 100nS
                                                                                                                                                                                DL501
 C543
                                                                                                                                                                                 DL503
 C544
                                                                                                                                                                                DL504
                         1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-224-11 s CERAMIC 7PF 0.25PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
 C545
C546
                                                                                                                                                                                                         1-235-181-00 s FILTER, BANDPASS 4.43MHz
1-235-584-11 s FILTER, LOW-PASS
1-235-584-11 s FILTER, LOW-PASS
1-235-181-00 s FILTER, BANDPASS 4.43MHz
1-239-085-11 s FILTER, LOW-PASS
                                                                                                                                                                                 FL301
  C547
                                                                                                                                                                                 FL302
  C549
                                                                                                                                                                                  FL401
  C551
                                                                                                                                                                                 FL501
                          1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-087-00 s CERAMIC, CHIP 4PF 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
  C553
                                                                                                                                                                                                         1-239-085-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-758-11 s FILTER, LOW-PASS
1-235-181-00 s FILTER, BANDPASS 4.43MHz
                                                                                                                                                                                 FL502
  C554
C560
                                                                                                                                                                                 FL503
FL504
  C561
                                                                                                                                                                                 FL505
  C563
                           1-124-589-11 s ELECT 47uF 20% 16V

1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V

1-124-589-11 s ELECT 47uF 20% 16V

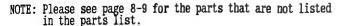
1-162-638-11 s CERAMIC, CHIP 1uF 16V

1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                          8-759-520-06 s IC NJM7809FA
8-759-700-68 s IC NJM79L09A
8-759-231-53 s IC TA7805S
8-741-104-00 s IC BX1040
  C565
                                                                                                                                                                                 IC2
  C567
                                                                                                                                                                                  IC3
  C570
                                                                                                                                                                                  IC4
  C573
                                                                                                                                                                                                           8-759-101-12 s IC UPC311G2
  C574
                           1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-282-00 s ELECT, NONPOLAR 22uF 20% 25V
1-162-638-11 s CERAMIC, CHIP 1uF 16V
1-131-374-00 s TANTALUM 33uF 10% 16V
                                                                                                                                                                                                          8-752-335-47 s IC CXD1216M
8-741-129-10 s IC BX-1291
8-752-332-67 s IC CXD1217M
1-808-513-12 s IC IB-38
8-759-925-72 s IC SN74HCO2NS
                                                                                                                                                                                  IC7
  C577
                                                                                                                                                                                  IC8
  C579
                                                                                                                                                                                  IC9
   C584
                                                                                                                                                                                 ĪC10
   C585
                                                                                                                                                                                                          8-759-948-28 s IC SM5828P
8-759-907-81 s IC SM74LS221NS
8-759-907-81 s IC SM74LS221NS
8-759-926-82 s IC SM74HC574ANS
8-759-926-82 s IC SM74HC574ANS
                           1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-124-589-11 s ELECT 47uF 20% 16V
   C586
                                                                                                                                                                                  IC12
   C587
                                                                                                                                                                                  IC13
   C589
                                                                                                                                                                                  IC14
   C590
                                                                                                                                                                                  IC15
   C591
                                                                                                                                                                                                          8-759-926-82 s IC SN74HC574ANS
8-759-209-20 s IC TC4584BF
8-759-209-20 s IC TC4584BF
8-759-989-56 s IC SN74ALS244BNS
8-759-300-71 s IC HD14053BFP
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V
1-163-235-11 s CERAMIC, CHIP 22PF 5% 50V
                                                                                                                                                                                  IC16
   C592
                                                                                                                                                                                  IC17
   C594
                                                                                                                                                                                  IC18
    C599
                                                                                                                                                                                   IC19
   C601
                                                                                                                                                                                  IC20
   C605
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
                                                                                                                                                                                                          8-759-063-39 s IC CXD8267Q
8-759-063-39 s IC CXD8267Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
                                                                                                                                                                                   IC101
   C606
                                                                                                                                                                                   IC102
    C608
                                                                                                                                                                                  IC103
   C610
                                                                                                                                                                                  IC104
   C614
                                                                                                                                                                                                           8-759-063-38 s IC CXD8276Q
                                                                                                                                                                                  IC105
   C616
                                                                                                                                                                                                          8-759-926-82 s IC SN74HC574ANS
                            1-164-232-11 s CERAMIC 0.01uF 10% 100V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                                  IC108
   C624
                                                                                                                                                                                  IC109
   C630
                                                                                                                                                                                  IC110
    C631
                                                                                                                                                                                  IC111
    C633
                                                                                                                                                                                  IC112
    C635
                                                                                                                                                                                                          8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
8-759-063-38 s IC CXD8276Q
                            1-124-589-11 s ELECT 47uF 20% 16V
1-124-589-11 s ELECT 47uF 20% 16V
1-163-243-11 s CERAMIC, CHIP 47PF 5% 50V
1-164-232-11 s CERAMIC 0.01uF 10% 100V
                                                                                                                                                                                 IC114
   C637
                                                                                                                                                                                 IC115
   C639
                                                                                                                                                                                  IC116
   C643
                                                                                                                                                                                                          8-759-505-01 s IC CXD8054
    C646
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(DA-63P BOARD used for DFS-500P) (DA-63P BOARD used for DFS-500P) Ref. No. or Q'ty Part No. SP Description Ref. No. or Q'ty Part No. SP Description 8-759-926-82 s IC SN74HC574ANS 8-759-926-82 s IC SN74HC574ANS 8-759-982-25 s IC RC78L09A 8-759-708-05 s IC NJM78L05A 8-759-515-12 s IC SN74ALS574BNS 1-410-470-11 s INDUCTOR 10uH Ľ9 Ľ10 IC119 IC201 L11 IC202 L12 TC203 8-759-515-12 s IC SN74ALS574BNS 8-759-515-12 s IC SN74ALS574BNS 8-759-515-12 s IC SN74ALS574BNS 8-752-032-93 s IC CXA1260Q-Z 8-752-032-96 s IC CXA1106M 1-410-470-11 s INDUCTOR 10uH 1-412-525-31 s INDUCTOR 10uH L13 IC204 L14 IC205 1-412-525-31 s INDUCTOR 10uH 1-412-525-31 s INDUCTOR 10uH L15 IC206 L101 IC207 1-410-470-11 s INDUCTOR 10uH L202 IC208 1-410-470-11 s INDUCTOR 10uH 8-759-906-59 s IC CX22017 8-759-702-07 s IC NJM13700M 8-759-520-06 s IC NJM7809FA 8-759-701-87 s IC NJM7909FA 8-759-231-53 s IC TA7805S L203 IC401 IC402 IC501 L204 L205 L206 IC502 L207 IC503 8-759-701-84 s IC NJM7905FA 8-759-984-88 s IC LM6361M 8-759-984-88 s IC LM6361M 8-759-984-88 s IC LM6361M 8-759-702-07 s IC NJM13700M 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-410-478-11 s INDUCTOR 47uH 1-410-470-11 s INDUCTOR 10uH L301 TC504 L302 IC505 L303 IC506 L401 IC507 1-408-422-00 5 INDUCTOR 120uH L402 **IC508** 1-410-470-11 s INDUCTOR 10uH L403 8-741-135-60 s IC BX1356 IC509 8-741-135-60 s IC BX1356 8-741-135-60 s IC BX1356 8-741-135-60 s IC BX1356 8-759-984-88 s IC LM6361M 8-759-984-88 s IC LM6361M IC510 IC511 L404 L501 L502 IC512 IC513 8-759-906-59 s IC CX22017 8-759-702-07 s IC NJM13700M 8-752-052-73 s IC CXA1451M 8-759-984-88 s IC LM6361M 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-408-422-00 s INDUCTOR 120uH 1-410-470-11 s INDUCTOR 10uH L504 IC514 L505 L506 IC516 IC517 IC518 L507 8-752-052-73 s IC CXA1451M L508 1-410-470-11 s INDUCTOR 10uH ▲1-532-637-00 s LINK, IC 1.0A ▲1-532-685-00 s LINK, IC 0.6A ▲1-532-637-00 s LINK, IC 1.0A 8-759-984-88 S IC LM6361M 8-759-702-07 S IC NJM13700M 8-752-052-73 S IC CXA1451M 8-759-984-88 S IC LM6361M 8-752-052-73 S IC CXA1451M PS1 PS2 IC521 IC522 IC523 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-112-65 s TRANSISTOR 2SA1462-Y33 IC524 Q2 Q3 Q4 Q5 8-759-702-07 s IC NJM13700M 8-759-984-88 s IC LMG361M 8-759-989-56 s IC SN74ALS244BNS 8-759-989-56 s IC SN74ALS244BNS 8-759-989-56 s IC SN74ALS244BNS 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-109-44 s TRANSISTOR 2SK94 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 IC526 IC601 IC602 8-729-175-73 s TRANSISTOR 2SC2757 IC603 8-729-112-65 s TRANSISTOR 2SA1462-Y33 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-109-44 s TRANSISTOR 2SK94 1-216-295-00 s METAL, CHIP 0 JR2 JR4 010 8-729-216-22 s TRANSISTOR 2SA1162 JR6 JR10 8-729-216-22 s TRANSISTOR 2SA1162 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 011 Q201 Q202 1-216-295-00 s METAL, CHIP 0 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 JR14 Q203 JR16 Q204 JR18 JR20 Q301 Q302 Q303 Q304 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-175-73 s TRANSISTOR 2SC2757 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 1-216-295-00 s METAL, CHIP 0 JR402 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH 1-408-413-00 s INDUCTOR 20uH Q305 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 L2 L3 Q306 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 8-729-216-22 s TRANSISTOR 2SC1623-L5L6 8-729-216-22 s TRANSISTOR 2SC1623-L5L6 8-729-175-73 s TRANSISTOR 2SC2757 8-729-216-22 s TRANSISTOR 2SC2757 Q307 Q308 L4 1-408-413-00 s INDUCTOR 22uH Q309 1-410-470-11 s INDUCTOR 10uH 1-410-470-11 s INDUCTOR 10uH



(DA-63P BOARD used for DFS-500P)	(DA-63P BOARD used for DFS-500P)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
Q312 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q313 8-729-175-73 s TRANSISTOR 2SC2757 Q315 8-729-216-22 s TRANSISTOR 2SA1162 Q316 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q401 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q535       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6         Q536       8-729-112-65 s       TRANSISTOR 2SA1462-Y33         Q537       8-729-216-22 s       TRANSISTOR 2SA1162         Q538       8-729-216-22 s       TRANSISTOR 2SA1162         Q540       8-729-120-28 s       TRANSISTOR 2SC1623-L5L6
Q402 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q403 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q404 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q405 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q406 8-729-216-22 s TRANSISTOR 2SA1162	Q541 8-729-116-64 S TRANSISTOR 2SK508-K51 Q542 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q545 8-729-175-73 S TRANSISTOR 2SC2757 Q546 8-729-216-22 S TRANSISTOR 2SA1162 Q548 8-729-116-64 S TRANSISTOR 2SK508-K51
Q402 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q403 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q404 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q405 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q406 8-729-216-22 s TRANSISTOR 2SA1162 Q407 8-729-216-22 s TRANSISTOR 2SA1162 Q408 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q409 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q410 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q411 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q411 8-729-120-28 s TRANSISTOR 2SC1623-L5L6	Q549 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q551 8-729-216-22 s TRANSISTOR 2SA1162 Q553 8-729-116-64 s TRANSISTOR 2SK508-K51 Q554 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q556 8-729-216-22 s TRANSISTOR 2SA1162
Q413 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q414 8-729-116-64 s TRANSISTOR 2SK508-K51 Q415 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q416 8-729-112-65 s TRANSISTOR 2SA1462-Y33 Q417 8-729-112-65 s TRANSISTOR 2SA1462-Y33	Q557 8-729-175-73 \$ TRANSISTOR 25C2757 Q558 8-729-216-22 \$ TRANSISTOR 25A1162 Q560 8-729-116-64 \$ TRANSISTOR 25X508-K51 Q561 8-729-112-65 \$ TRANSISTOR 25A1462-Y33 Q563 8-729-216-22 \$ TRANSISTOR 25A1162
Q418 8-729-175-73 S TRANSISTOR 2SC2757 Q419 8-729-175-73 S TRANSISTOR 2SC2757 Q420 8-729-175-73 S TRANSISTOR 2SC2757 Q421 8-729-175-73 S TRANSISTOR 2SC2757	Q564 8-729-175-73 \$ TRANSISTOR 2SC2757 Q565 8-729-216-22 \$ TRANSISTOR 2SA1162 Q567 8-729-116-64 \$ TRANSISTOR 2SK508-K51 Q568 8-729-112-65 \$ TRANSISTOR 2SA1462-Y33 Q572 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6
Q423 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q424 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q425 8-729-216-22 S TRANSISTOR 2SA1162 Q426 8-729-216-22 S TRANSISTOR 2SA1162 Q427 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	Q573 8-729-216-22 S TRANSISTOR 2SA1162 Q574 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q577 8-729-175-73 S TRANSISTOR 2SC2757 Q578 8-729-216-22 S TRANSISTOR 2SA1162
Q423 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q424 8-729-112-65 \$ TRANSISTOR 2SA1462-Y33 Q425 8-729-216-22 \$ TRANSISTOR 2SA1162 Q426 8-729-216-22 \$ TRANSISTOR 2SA1162 Q427 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q501 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q502 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q503 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q503 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q504 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q505 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q506 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q507 8-729-120-28 \$ TRANSISTOR 2SC1623-L5L6 Q508 8-729-16-22 \$ TRANSISTOR 2SC1623-L5L6 Q509 8-729-216-22 \$ TRANSISTOR 2SA1162 Q512 8-729-216-22 \$ TRANSISTOR 2SA1162 Q514 8-729-216-22 \$ TRANSISTOR 2SA1162	R2 1-216-691-11 S METAL, CHIP 47K 0.5% 1/10W R7 1-216-615-11 S METAL, CHIP 33 0.5% 1/10W R8 1-218-776-11 S METAL 1M 0.5% 1/10W R10 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W R13 1-216-695-11 S METAL, CHIP 68K 0.5% 1/10W
TOTAL AND AND AND ACCIOCAL TELE	
Q516 8-729-116-64 S TRANSISTOR 2SK508-K51 Q517 8-729-112-65 S TRANSISTOR 2SA1462-Y33 Q518 8-729-175-73 S TRANSISTOR 2SC2757 Q519 8-729-175-73 S TRANSISTOR 2SC2757	R28 1-216-642-11 s METAL, CHIP 430 0.5% 1/10W R31 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W R36 1-216-687-11 s METAL, CHIP 33% 0.5% 1/10W R38 1-216-623-11 s METAL, CHIP 68 0.5% 1/10W R39 1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
Q520 8-729-112-65 S TRANSISTOR 2SA1462-Y33  Q521 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q522 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q523 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q524 8-729-216-22 S TRANSISTOR 2SA1162 Q525 8-729-216-22 S TRANSISTOR 2SA1162	R41 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W R44 1-216-679-11 S METAL, CHIP 15K 0.5% 1/10W R45 1-216-663-11 S METAL, CHIP 3.3K 0.5% 1/10W R48 1-216-683-11 S METAL, CHIP 22K 0.5% 1/10W R49 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W
Q526 8-729-175-73 S TRANSISTOR 2SC2757 Q527 8-729-175-73 S TRANSISTOR 2SC2757 Q528 8-729-120-28 S TRANSISTOR 2SC1623-L5L6 Q529 8-729-112-65 S TRANSISTOR 2SC1623-L5L6 Q530 8-729-120-28 S TRANSISTOR 2SC1623-L5L6	R53 1-216-671-11 S METAL, CHIP 6.8K 0.5% 1/10W R208 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W R209 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W R210 1-216-647-11 S METAL, CHIP 680 0.5% 1/10W R211 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W R211 1-216-655-11 S METAL, CHIP 1.5K 0.5% 1/10W
Q531 8-729-120-28 s TRANSISTOR 2SC1623-L5L6 Q532 8-729-216-22 s TRANSISTOR 2SA1162 Q533 8-729-175-73 s TRANSISTOR 2SC2757 Q534 8-729-175-73 s TRANSISTOR 2SC2757	R302 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R305 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W R309 1-216-641-11 s METAL, CHIP 390 0.5% 1/10W R310 1-216-641-11 s METAL, CHIP 390 0.5% 1/10W R312 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W





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(DA-63P BOARD used for DFS-500P)
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Ref. No. or Q'ty Part No.
                                                   SP Description
                      1-216-640-11 s METAL, CHIP 360 0.5% 1/10W
1-216-655-11 s METAL, CHIP 1.5% 0.5% 1/10W
1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
1-216-663-11 s METAL, CHIP 3.3% 0.5% 1/10W
1-216-687-11 s METAL, CHIP 3.3% 0.5% 1/10W
R750
R756
R759
R761
 R768
                      1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-216-640-11 s METAL, CHIP 360 0.5% 1/10W
R770
R772
 R776
 R778
                       1-216-640-11 s METAL, CHIP 360 0.5% 1/10W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W 1-215-394-00 s METAL 75 1% 1/6W
 R779
 R780
 R781
 R782
                       1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R797
                       1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R798
 R799
 R808
 R811
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB102
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB103
 RB104
                        1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB105
                        1-231-411-00 s RESISTOR BLOCK 100 Hx8
 RB106
                       1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB107
  RB108
  RB109
  RB110
                         1-231-411-00 s RESISTOR BLOCK 100Kx8
                        1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB111
  RB112
                        1-231-411-00 S RESISTOR BLOCK 100Kx8
  RB113
  RB114
  RB115
                        1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB202
  RB203
  RB204
                         1-231-385-00 s RESISTOR BLOCK 4.7Kx8
  RB205
                        1-228-993-00 s RES, ADJ METAL 4.7K
1-237-503-21 s RES, ADJ METAL 10K
1-237-502-21 s RES, ADJ METAL 5K
1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
  RV2
  RV3
  RV4
  RV5
                         1-228-995-00 s RES, ADJ METAL 22K
  RV6
                        1-228-995-00 s RES, ADJ METAL 22K
1-228-995-00 s RES, ADJ METAL 22K
1-228-994-00 s RES, ADJ METAL 10K
1-228-994-00 s RES, ADJ METAL 10K
  RV7
  RV8
  RV9
  RV10
                        1-237-501-21 s RES, ADJ METAL 2K
1-228-989-00 s RES, ADJ METAL 470
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-993-00 s RES, ADJ METAL 4.7K
  RV11
  RV301
  RV401
RV402
  RV403
                       1-237-500-21 s RES, ADJ METAL 1K
1-228-990-00 s RES, ADJ METAL 1K
1-228-993-00 s RES, ADJ METAL 4.7K
1-228-991-00 s RES, ADJ METAL 2.2K
1-237-500-21 s RES, ADJ METAL 1K
  RV404
  RV406
  RV 504
 RV 506
  RV507
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(DA-63P BOARD used for DFS-500P)

Ref. No. or Q'ty	Part No. SP	Description	
RV508 RV509 RV511 RV512 RV513	1-237-500-21 s 1-237-500-21 s 1-228-993-00 s 1-228-991-00 s 1-228-993-00 s	RES, ADJ METAL 1K RES, ADJ METAL 1K RES, ADJ METAL 4.7K RES, ADJ METAL 2.2K RES, ADJ METAL 4.7K	,
RV515 RV516 RV518 RV520	1-228-989-00 s 1-237-501-21 s 1-228-990-00 s 1-237-501-21 s	RES, ADJ METAL 4.7K RES, ADJ METAL 470 RES, ADJ METAL 2K RES, ADJ METAL 1K RES, ADJ METAL 2K	
RV521 RV522 RV523 RV524 RV525	1-228-989-00 s 1-237-501-21 s 1-228-989-00 s 1-237-501-21 s 1-228-990-00 s	RES, ADJ METAL 470 RES, ADJ METAL 2K RES, ADJ METAL 470 RES, ADJ METAL 2K RES, ADJ METAL 1K	
RV526	1-228-989-00 s	RES, ADJ METAL 470	
\$1 \$2 \$3 \$101 \$102	1-570-373-12 s 1-554-399-00 s 1-553-252-00 s 1-554-027-00 s 1-570-514-11 s	SWITCH, SLIDE SWITCH, TOGGLE SWITCH, DIGITAL SWITCH, SLIDE	
S103	1-554-027-00 s	SWITCH, DIGITAL	
TH1	1-800-071-11 s	THERMISTER, S-300	
VC01 VC02	1-577-295-11 s 1-577-294-11 s	VCO, CRYSTAL 17.734475MHz VCO, CRYSTAL 14.187500MHz	

FM-29/FM	I-29P BOARD	(FM-29/FM-29P BOARD)
Ref. No.	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc 1pc	Part No. SP Description  A-8271-684-A o MOUNTED CIRCUIT BAORD, FM-29 (for DFS-500)  A-8271-693-A o MOUNTED CIRCUIT BOARD, FM-29P (for DFS-500P)  3-166-184-01 o LEVER, PC BOARD	C48 1-161-055-00 s CERAMIC 0.022uF 10% 50V C49 1-161-055-00 s CERAMIC 0.022uF 10% 50V C50 1-161-055-00 s CERAMIC 0.022uF 10% 50V C51 1-161-055-00 s CERAMIC 0.022uF 10% 50V C52 1-161-055-00 s CERAMIC 0.022uF 10% 50V
2pcs 2pcs 1pc 8pcs 2pcs	3-166-184-01 o LEVER, PC BOARD 3-166-185-01 s NUT, PLATE 3-178-157-01 o PLATE, SHIELD 4-886-821-11 s SCREW, S TIGHT, +PTTWH 3X6 7-622-207-05 s N 2.6, TYPE 2	C53 1-161-055-00 s CERAMIC 0.022uF 10% 50V C54 1-161-055-00 s CERAMIC 0.022uF 10% 50V C55 1-161-055-00 s CERAMIC 0.022uF 10% 50V C56 1-161-055-00 s CERAMIC 0.022uF 10% 50V C57 1-161-055-00 s CERAMIC 0.022uF 10% 50V
2pcs 6pcs	7 COCTURLIT & DIN SUDING YES	
C1 C2 C3 C4	7-628-254-40 s SCREW +PS 2.6X12 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V	C60 1-161-055-00 s CERAMIC 0.022uF 10% 50V C61 1-161-055-00 s CERAMIC 0.022uF 10% 50V C62 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C5 C6 C7 C8	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C63 1-161-055-00 s CERAMIC 0.022UF 10% 50V C64 1-161-055-00 s CERAMIC 0.022UF 10% 50V C65 1-161-055-00 s CERAMIC 0.022UF 10% 50V C66 1-161-055-00 s CERAMIC 0.022UF 10% 50V C67 1-161-055-00 s CERAMIC 0.022UF 10% 50V
C9 C10 C11 C12 C13	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C68 1-161-055-00 s CERAMIC 0.022uF 10% 50V C69 1-161-055-00 s CERAMIC 0.022uF 10% 50V C70 1-161-055-00 s CERAMIC 0.022uF 10% 50V C71 1-161-055-00 s CERAMIC 0.022uF 10% 50V C72 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C14 C15 C16 C17	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-772-11 s CERAMIC 0.1uF 10% 25V	C73 1-161-055-00 s CERAMIC 0.022uF 10% 50V C74 1-161-055-00 s CERAMIC 0.022uF 10% 50V C75 1-161-055-00 s CERAMIC 0.022uF 10% 50V C76 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C18 C19 C20	1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-772-11 s CERAMIC 0.1uF 10% 25V	C77 1-161-055-00 s CERAMIC 0.022uF 10% 50V C78 1-161-055-00 s CERAMIC 0.022uF 10% 50V C79 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C21 C22 C23 C24 C25	1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C80 1-161-772-11 s CERAMIC 0.1uF 10% 25V C81 1-161-772-11 s CERAMIC 0.1uF 10% 25V C82 1-161-055-00 s CERAMIC 0.022uF 10% 50V C83 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C26 C27 C28	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C84 1-161-055-00 s CERAMIC 0.022uF 10% 50V C85 1-161-772-11 s CERAMIC 0.1uF 10% 25V C86 1-161-055-00 s CERAMIC 0.022uF 10% 50V C87 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C29 C30 C31 C32 C33	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C88 1-161-055-00 s CERAMIC 0.022uF 10% 50V C89 1-161-055-00 s CERAMIC 0.022uF 10% 50V C90 1-161-772-11 s CERAMIC 0.1uF 10% 25V C91 1-161-055-00 s CERAMIC 0.022uF 10% 50V C92 1-161-772-11 s CERAMIC 0.1uF 10% 25V
C34 C35	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C93 1-161-055-00 s CERAMIC 0.022uF 10% 50V C94 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C36 C37 C38 C39	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-772-11 s CERAMIC 0.1uF 10% 25V	C95 1-161-055-00 s CERAMIC 0.022uF 10% 50V C96 1-161-055-00 s CERAMIC 0.022uF 10% 50V C97 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C40 C41 C42 C43 C44	1-161-772-11 s CERAMIC 0.1uF 10% 25V  1-161-772-11 s CERAMIC 0.1uF 10% 25V	C98 1-161-772-11 s CERAMIC 0.1uF 10% 25V C99 1-161-772-11 s CERAMIC 0.1uF 10% 25V C100 1-161-055-00 s CERAMIC 0.022uF 10% 50V C101 1-161-772-11 s CERAMIC 0.1uF 10% 25V C102 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C45 C46 C47	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C103 1-161-055-00 s CERAMIC 0.022uF 10% 50V C104 1-161-055-00 s CERAMIC 0.022uF 10% 50V C105 1-161-055-00 s CERAMIC 0.022uF 10% 50V C106 1-161-055-00 s CERAMIC 0.022uF 10% 50V



(FM-29/FM	1-29P BOARD)	(FM-29/F	M-29P BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty	Part No. SP Description
C107 C108 C109 C110 C111	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-772-11 s CERAMIC 0.1uF 10% 25V	IC23 IC24 IC25 IC26 IC27	8-759-989-55 s IC SN74ALS244BN 8-759-900-69 s IC SN74ALS74AN 8-759-945-78 s IC SN74ALS11AN 8-759-904-18 s IC SN74ALS00AN 8-759-936-54 s IC SN74ALS175N
C112 C113 C114 C115 C116	1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC28 IC29 IC30 IC31 IC32	8-759-515-08 S IC SN74ALS374AN 8-759-904-18 S IC SN74ALS00AN 8-752-304-30 S IC CX23043 8-759-912-05 S IC SN74ALS161BN 8-759-515-08 S IC SN74ALS374AN
C117 C118 C119 C120 C121	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-772-11 s CERAMIC 0.1uF 10% 25V	IC33 IC34 IC35 IC36 IC37	8-759-903-74 S IC SN74LS374N 8-759-916-01 S IC SN74ALS153N 8-759-901-94 S IC SN74LS194AN 8-759-901-94 S IC SN74LS194AN 8-759-901-94 S IC SN74LS194AN
C122 C123 C124 C125 C126	1-124-584-00 s ELECT 100uF 20% 10V 1-124-584-00 s ELECT 100uF 20% 10V 1-161-772-11 s CERAMIC 0.1uF 10% 25V 1-124-584-00 s ELECT 100uF 20% 10V 1-124-584-00 s ELECT 100uF 20% 10V	IC38 IC39 IC40 IC41 IC42	8-759-901-94 S IC SN74LS194AN 8-752-340-75 S IC CXK1206AM 8-752-340-75 S IC CXK1206AM 8-752-340-75 S IC CXK1206AM 8-752-340-75 S IC CXK1206AM
C127 C128 C129 C130 C131	1-124-584-00 s ELECT 100uF 20% 10V 1-124-584-00 s ELECT 100uF 20% 10V 1-124-584-00 s ELECT 100uF 20% 10V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC43 IC44 IC45 IC46 IC47	8-752-340-75 s IC CXX1206AM 8-752-340-75 s IC CXX1206AM 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN
C201 C202 C203 C204 C205	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC48 IC49 IC50 IC51 IC52	8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-912-03 s IC SN74ALS138N 8-759-912-03 s IC SN74ALS138N 8-759-983-24 s IC CXD8033Q
C206	1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC53 IC54	8-759-936-54 s IC SN74ALS175N 8-759-936-54 s IC SN74ALS175N
CN13 CN14 CN15	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE 1-506-748-11 o CONNECTOR, DIN 96P, MALE	IC55 IC56 IC57	8-759-946-64 s IC SN74ALS04BN 8-759-904-18 s IC SN74ALS00AN 8-759-055-72 s IC SN74ALS21AN
CN 1107	and the second s	IC58 IC59	8-759-925-08 s IC SN74ALS174N 8-759-912-05 s IC SN74ALS161BN
IC1 IC2 IC3	8-759-969-55 S IC SN74ALS74AN 8-759-945-78 S IC SN74ALS71AN	IC60 IC61 IC62	8-759-515-08 s IC SN74ALS374AN 8-759-916-01 s IC SN74ALS153N 8-759-916-01 s IC SN74ALS153N
IC4 IC5 IC6 IC7 IC8	8-759-904-18 s IC SN74ALSOOAN 8-759-936-54 s IC SN74ALS175N 8-759-515-08 s IC SN74ALS374AN 8-759-904-18 s IC SN74ALSOOAN 8-752-304-30 s IC CX23043	IC63 IC64 IC65 IC66 IC67	8-759-946-64 s IC SN74ALS04BN 8-759-904-38 s IC SN74ALS32N 8-759-904-38 s IC SN74ALS32N 8-759-904-38 s IC SN74ALS32N 8-759-515-08 s IC SN74ALS374AN
IC9 IC10	8-759-912-05 s IC SN74ALS161BN 8-759-515-08 s IC SN74ALS374AN	IC68 IC69	8-759-515-08 s IC SN74ALS374AN 8-759-925-08 s IC SN74ALS174N
IC11 IC12 IC13	8-759-903-74 S IC SN74LS374N 8-759-916-01 S IC SN74ALS153N 8-759-901-94 S IC SN74LS194AN 8-759-901-94 S IC SN74LS194AN	IC70 IC71 IC72	8-759-515-08 s IC SN74ALS374AN 8-759-925-08 s IC SN74ALS174N 8-759-925-08 s IC SN74ALS174N
IC14 IC15	8-759-901-94 S IC SN74LS194AN	IC73 IC74	8-759-912-03 s IC SN74ALS138N 8-759-912-03 s IC SN74ALS138N
IC16 IC17 IC18 IC19	8-759-901-94 s IC SN74LS194AN 8-752-340-75 s IC CXK1206AM 8-752-340-75 s IC CXK1206AM 8-752-340-75 s IC CXK1206AM	IC75 IC76 IC77	8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-759-063-42 s IC CXD8264Q
IC 20 IC 21	8-752-340-75 s IC CXK1206AM 8-752-340-75 s IC CXK1206AM	IC78 IC79 IC80	8-759-989-55 s IC SN74ALS244BN 8-759-989-55 s IC SN74ALS244BN 8-752-322-06 s IC CXK5814P-35
	8-752-340-75 s IC CXK1206AM	IC81	8-752-322-06 s IC CXK5814P-35

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(FM-29/FM-29P BOARD)
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Ref. No. or Q'ty Part No.
                                                          SP Description
                        8-759-500-72 s IC SN74ALS157AN
8-759-500-72 s IC SN74ALS157AN
8-759-989-55 s IC SN74ALS244BN
8-752-322-06 s IC CXK5814P-35
8-759-515-08 s IC SN74ALS374AN
TC82
IC83
 IC84
 IC85
 IC86
                        8-759-515-08 s IC SN74ALS374AN
8-759-515-08 s IC SN74ALS374AN
8-759-989-55 s IC SN74ALS244BN
 IC87
IC88
 IC89
                         8-752-322-06 s IC CXK5814P-35
8-759-989-55 s IC SN74ALS244BN
 IC90
 IC91
                         8-752-322-06 s IC CXK5814P-35
8-759-901-94 s IC SN74LS194AN
8-759-901-94 s IC SN74LS194AN
8-759-901-94 s IC SN74LS194AN
8-759-901-94 s IC SN74LS194AN
 IC92
 IC93
 IC94
 IC95
 IC96
                         8-759-989-55 S IC SN74ALS244BN
8-752-340-75 S IC CXK1206AM
8-752-340-75 S IC CXK1206AM
8-759-515-08 S IC SN74ALS374AN
8-752-340-75 S IC CXK1206AM
 IC97
  IC98
  IC99
  IC100
 IC101
                         8-759-925-08 s IC SN74ALS174N
8-759-925-08 s IC SN74ALS174N
8-759-990-59 s IC N74F377N
8-759-990-59 s IC N74F377N
8-759-904-26 s IC SN74ALS08N
  IC102
  IC103
  IC104
  IC105
  IC106
                          8-759-999-42 s IC CXD8070K
8-759-063-38 s IC CXD8276Q
8-752-340-57 s IC CXK1203Q
8-752-340-57 s IC CXK1203Q
8-752-340-57 s IC CXK1203Q
  IC107
  IC108
  IC109
IC110
   IC111
                          8-752-340-57 s IC CXK1203Q
8-752-340-57 s IC CXK1203Q
8-759-063-43 s IC CXD8263Q
8-759-063-38 s IC CXD8276Q
8-759-515-08 s IC SN74ALS374AN
   IC113
  IC114
  IC115
   IC116
                          8-759-925-08 s IC SN74ALS174N
8-759-515-08 s IC SN74ALS374AN
8-759-990-59 s IC N74F377N
8-759-990-59 s IC N74F377N
8-752-340-57 s IC CXK1203Q
   IC118
   IC119
   IC120
   IC121
                          8-759-515-08 s IC SN74ALS374AN
8-759-515-08 s IC SN74ALS374AN
8-759-912-03 s IC SN74ALS138N
8-759-901-64 s IC SN74LS164N
8-759-936-53 s IC SN74ALS151N
   IC122
   IC123
   IC201
   IC202
   IC203
                           8-759-900-69 s IC SN74ALS74AH
8-759-900-69 s IC SN74ALS74AN
8-759-925-08 s IC SN74ALS174N
   IC204
   IC205
   IC206
                           1-412-525-31 s INDUCTOR 10uH
  L1
                     1-532-984-11 s LINK, IC 2A
  PS1
                           1-231-410-00 s RESISTOR BLOCK 10Kx8
1-231-410-00 s RESISTOR BLOCK 10Kx8
1-231-533-00 s RESISTOR BLOCK 10Kx4
   RB1
   RB2
   RB3
                           1-553-925-00 s SWITCH, DIGITAL
1-553-925-00 s SWITCH, DIGITAL
1-554-027-00 s SWITCH, DIGITAL
1-554-027-00 s SWITCH, DIGITAL
   S2
   S3
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(FM-29/FM-29P BOARD)

Ref. No. or Q'ty Part No. SP Description
S5 1-554-027-00 s SWITCH, DIGITAL



KY-223 BOARD		<b>( K</b> Y-223	BOARD)
Ref. No. or O'ty Part No.	SP Description	Ref. No. or Q'ty	Part No. SP Description
1pc A-8271-6 1pc 2-139-13 6pcs 2-140-31 1pc 3-177-55 4pcs 3-178-14	86-A C MOUNTED CIRCUIT BOARD, KY-223 1-01 O HEAT SINK, CON. 1-04 S KEY TOP 9-01 O CHIP (A), SW 10-01 O SPACER	D88 D90 D92 D93 D94	8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN
2pcs 3-708-56 21pcs 4-928-31 1pc 7-682-95	33-01 0 CAP 5-01 s KEY TOP 50-01 s SCREW +PSW 3X12	D95 D101 D102 D214 D224	8-719-979-87 s LED LD-701MG, GRN 8-719-400-18 s DIODE MA152WK 8-719-109-84 s DIODE RD5.1ES-B1 8-719-030-51 s DIODE LD-010MW 8-719-030-51 s DIODE LD-010MW
BZ1 1-529-02	20-00 S BUZZEK	D235	8-719-979-87 S LED LD-701MG. GRN
C1 1-126-94 C3 1-126-94 C5 1-126-94 C7 1-126-94 C10 1-124-56	18-11 S ELECT 100uF 20% 35V 18-11 S ELECT 47uF 20% 16V	IC1 IC2 IC3 IC4	8-749-920-71 s IC SI3522V 8-759-929-86 s IC SN74LS14NS 8-759-970-26 s IC PST523C 8-759-926-32 s IC AM26LS32PC 8-759-926-31 s IC AM26LS31PC
C61 1-124-5 C71 1-124-5 C123 1-124-2 C124 1-163-1 C127 1-124-5 C129 1-124-5	89-11 S ELECT 47uF 20% 16V 57-00 S ELECT 2.2uF 20% 50V 45-00 S CERAMIC, CHIP 0.0015uF 5% 50V 89-11 S ELECT 47uF 20% 16V	IC6 IC7 IC8 IC9 IC10	8-759-926-49 s IC SN74HC245NS 8-759-926-68 s IC SN74HC375ANS 8-795-926-80 s IC SN74HC573BNS 8-795-926-80 s IC SN74HC573BNS 8-752-800-46 s IC CXQ70108P-8
CN1 1-506-6 CN2 1-506-4 CN3 1-506-4 CN4 1-506-4 CN5 1-506-4	99-11 O CONNECTOR, LCSC 26P, MALE 80-11 S CONNECTOR, 15P, MALE 80-11 S CONNECTOR, 15P, MALE 80-11 S CONNECTOR, 15P, MALE 69-11 S CONNECTOR 4P, MALE	IC11 IC12 IC13 IC14 IC15	8-759-922-49 s IC SN74LS74ANS 8-759-925-78 s IC SN74HC10NS 8-759-926-11 s IC SN74HC138NS 8-759-088-10 o IC 27C256-NPKY14V1.01, EPROM 8-752-337-81 s IC CXK58257AM-12LL
CN6 1-506-4 CN7 1-506-4 CN8 1-506-4 CN9 1-506-4	69-11 s CONNECTOR 4P, MALE 75-11 s CONNECTOR, 10P, MALE 75-11 s CONNECTOR, 10P, MALE 69-11 s CONNECTOR 4P, MALE	IC16 IC17 IC18 IC19 IC20	8-752-806-91 s IC CXQ71054P 8-759-107-51 s IC CXQ71051P 8-759-006-95 s IC MC74HC154N 8-759-106-58 s IC UPD7004C 8-759-009-06 s IC MC14052BF
CNI14 1-526-6	59-00 o SOCKET, IC 28P	IC21	8-759-009-06 s IC MC14052BF
D38 8-719-9 D39 8-719-9 D40 8-719-9 D46 8-719-9 D47 8-719-9	59-00 o SOCKET, IC 28P  179-87 s LED LD-701MG, GRN	1C22 1C23 1C24 1C25	8-759-927-46 s IC SN74HCOONS 8-759-927-23 s IC SN74HCT574NS 8-759-927-23 s IC SN74HCT574NS 8-759-930-93 s IC SN74LS283NS
D48 8-719-9 D50 8-719-9 D51 8-719-9 D52 8-719-9	179-87 S LED LD-701MG, GRN 179-87 S LED LD-701MG, GRN 179-87 S LED LD-701MG, GRN 179-87 S LED LD-701MG, GRN 179-87 S LED LD-701MG, GRN	IC26 IC27 IC28 IC29 IC30	8-759-241-03 s IC TC74HC191AF 8-759-241-03 s IC TC74HC191AF 8-759-241-03 s IC TC74HC191AF 8-759-241-03 s IC TC74HC191AF 8-759-241-03 s IC TC74HC191AF
D54 8-719-9 D55 8-719-9 D56 8-719-9 D57 8-719-9	979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN	IC31 IC32 IC33 IC34 IC35	8-759-241-03 s IC TC74HC191AF 8-759-930-93 s IC SN74LS283NS 8-759-930-93 s IC SN74LS283NS 8-759-925-74 s IC TC74HC04NS 8-759-926-48 s IC SN74HC244NS
D59 8-719-9 D60 8-719-9 D61 8-719-9 D62 8-719-9	979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN	IC36 IC37 IC38 IC39 IC40	8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS
D68 8-719-9 D69 8-719-9 D80 8-719-9 D81 8-719-9	979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN 979-87 S LED LD-701MG, GRN	IC41 IC42 IC43 IC44 IC45	8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS 8-759-926-11 s IC SN74HC138NS 8-759-006-95 s IC MC74HC154N 8-759-926-48 s IC SN74HC244NS
	979-87 s LED LD-701MG, GRN	IC46 IC47	8-759-926-48 s IC SN74HC244NS 8-759-926-82 s IC SN74HC574ANS

(KY-223 BOARD) (KY-223 BOARD) Ref. No. or Q'ty Part No. SP Description Ref. No. or Q'ty Part No. SP Description 1-216-053-00 s METAL, CHIP 1.5% 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5% 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5% 5% 1/10W 1-216-097-00 s METAL, CHIP 100% 5% 1/10W 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS R8 **IC49** IC50 R9 R10 IC51 IC52 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 1-216-097-00 s METAL, CHIP 100X 5% 1/10W 1-216-073-00 s METAL, CHIP 10X 5% 1/10W R12 R14 IC54 R15 IC55 IC56 R16 R17 IC57 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W IC58 R19 IC59 R20 IC60 IC61 R21 R22 IC62 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 1-216-073-00 s METAL, CHIP 10K 5% 1/10W **IC63** R24 IC64 R25 IC65 R26 **IC66 R27** IC67 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W **IC68** IC69 IC70 R29 R30 R31 IC71 R32 **IC72** 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74LS247NS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R33 **IC73** IC74 R34 ÎC75 IC76 R35 R36 ĪĊ77 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R38 **IC78** R39 **IC79 IC80** R40 R41 IC81 IC82 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 1-216-073-00 s METAL, CHIP 10K 5% 1/10W **IC83** R44 R45 **IC84** IC85 **R46** IC86 **IC87** R47 8-759-206-41 s IC TD62083AP 8-759-907-81 s IC SN74LS221NS 8-759-206-41 s IC TD62083AP 8-759-206-41 s IC TD62083AP 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R48 TC88 R49 **IC89** R50 IC90 R51 IC91 R52 1-412-525-31 s INDUCTOR 10uH L1 1-216-073-00 s METAL, CHIP 10K 5% 1/10W **R53** 8-719-906-41 s LED GL-9D03D, RED R54 ND7 R55 ND8 R56 ND9 R57 ND10 ND11 1-216-073-00 s METAL, CHIP 10K 5% 1/10W 8-719-906-41 s LED GL-9D03D, RED 8-719-906-41 s LED GL-9D03D, RED **R59** ND12 R60 ND13 R61 **1-532-637-00 s LINK, IC 1.0A** R62 PS1 1-216-049-00 s METAL, CHIP 1K 5% 1/10W 1-216-043-00 s METAL, CHIP 560 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R63 R64 R4 R5



(KY-223 BOARD)	(KY-223 BOARD)
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
R67 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R68 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R69 1-216-041-00 s METAL, CHIP 470 5% 1/10W R70 1-216-041-00 s METAL, CHIP 470 5% 1/10W R71 1-216-041-00 s METAL, CHIP 470 5% 1/10W	
R72 1-216-041-00 s METAL, CHIP 470 5% 1/10W R73 1-216-041-00 s METAL, CHIP 470 5% 1/10W R74 1-216-041-00 s METAL, CHIP 470 5% 1/10W R75 1-216-041-00 s METAL, CHIP 470 5% 1/10W R76 1-216-041-00 s METAL, CHIP 470 5% 1/10W	R131 1-216-033-00 s METAL, CHIP 220 5% 1/10W R132 1-216-033-00 s METAL, CHIP 220 5% 1/10W R133 1-216-033-00 s METAL, CHIP 220 5% 1/10W R134 1-216-033-00 s METAL, CHIP 220 5% 1/10W R135 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R77 1-216-041-00 s METAL, CHIP 470 5% 1/10W R78 1-216-041-00 s METAL, CHIP 470 5% 1/10W R79 1-216-041-00 s METAL, CHIP 470 5% 1/10W R80 1-216-041-00 s METAL, CHIP 470 5% 1/10W R81 1-216-041-00 s METAL, CHIP 470 5% 1/10W	R136 1-216-033-00 s METAL, CHIP 220 5% 1/10W R137 1-216-033-00 s METAL, CHIP 220 5% 1/10W R138 1-216-033-00 s METAL, CHIP 220 5% 1/10W R139 1-216-033-00 s METAL, CHIP 220 5% 1/10W R140 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R82 1-216-041-00 s METAL, CHIP 470 5% 1/10W R83 1-216-049-00 s METAL, CHIP 1% 5% 1/10W R84 1-216-049-00 s METAL, CHIP 1% 5% 1/10W R85 1-216-097-00 s METAL, CHIP 100% 5% 1/10W R86 1-216-097-00 s METAL, CHIP 100% 5% 1/10W R87 1-216-097-00 s METAL, CHIP 100% 5% 1/10W R87 1-216-097-00 s METAL, CHIP 100% 5% 1/10W	R141 1-216-033-00 s METAL, CHIP 220 5% 1/10W R142 1-216-033-00 s METAL, CHIP 220 5% 1/10W R143 1-216-033-00 s METAL, CHIP 220 5% 1/10W R144 1-216-033-00 s METAL, CHIP 220 5% 1/10W R145 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R89 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R90 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R91 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R148 1-216-033-00 s METAL, CHIP 220 5% 1/10W R149 1-216-033-00 s METAL, CHIP 220 5% 1/10W R150 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R92 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R93 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R94 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R95 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R96 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R151 1-216-033-00 s METAL, CHIP 220 5% 1/10W R152 1-216-033-00 s METAL, CHIP 220 5% 1/10W R153 1-216-033-00 s METAL, CHIP 220 5% 1/10W R154 1-216-033-00 s METAL, CHIP 220 5% 1/10W R155 1-216-033-00 s METAL, CHIP 220 5% 1/10W
R97 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R98 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R99 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R100 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R101 1-216-097-00 s METAL, CHIP 100K 5% 1/10W	R156 1-216-033-00 s METAL, CHIP 220 5% 1/10W R157 1-216-033-00 s METAL, CHIP 220 5% 1/10W R158 1-216-033-00 s METAL, CHIP 220 5% 1/10W R159 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W R160 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W
R102 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R103 1-216-033-00 s METAL, CHIP 220 5% 1/10W R104 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R105 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R106 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R161 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R162 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R163 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R164 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R165 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R107 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R108 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R109 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R110 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R111 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R166 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R167 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R168 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R169 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R170 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R112 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R113 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R114 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R115 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R116 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R171 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R172 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R173 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R174 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R175 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
R117 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R118 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R119 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R120 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R121 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W	R176 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R177 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R178 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R179 1-216-025-00 s METAL, CHIP 100 5% 1/10W R180 1-216-025-00 s METAL, CHIP 100 5% 1/10W
R122 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R123 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R124 1-216-033-00 s METAL, CHIP 220 5% 1/10W R125 1-216-033-00 s METAL, CHIP 220 5% 1/10W	R181 1-216-025-00 s METAL, CHIP 100 5% 1/10W R182 1-216-025-00 s METAL, CHIP 100 5% 1/10W R183 1-216-025-00 s METAL, CHIP 100 5% 1/10W R184 1-216-025-00 s METAL, CHIP 100 5% 1/10W

(KY-223 BOARD) (KY-223 BOARD) Ref. No. or Q'ty Part No. Ref. No. or Q'ty Part No. SP Description SP Description 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R245 R186 R246 R187 R247 R188 R248 R189 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W R249 R190 R250 R191 R251 R192 R252 R193 R194 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R254 R195 R255 R196 R256 R197 R257 R198 R258 R199 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R259 R200 R260 R201 R261 R202 R262 R203 R263 R204 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R205 R265 R206 R266 R207 R267 R208 R209 R268 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-121-00 s METAL, CHIP 1M 5% 1/10W 1-216-097-00 s METAL, CHIP 100K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL R269 R210 R270 R211 R271 R212 R272 R213 1-216-029-00 s METAL, CHIP 150 5% 1/10W R214 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R274 R215 R275 R216 R276 R217 R277 R218 R278 R219 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R279 R220 R221 R280 R222 R281 R223 R282 R283 R224 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R284 R225 R285 R226 R286 R227 R228 R287 R288 R229 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W R289 R230 R290 R231 R291 R232 R233 R292 R234 R293 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R294 R235 R295 R236 R296 R237 R238 R297 R298 R239 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W R299 R240 R300 R241 R301 R242 1-216-029-00 s METAL, CHIP 150 5% 1/10W R302



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(KY-223 BOARD)
(KY-223 BOARD)
                                                                                                                                     Ref. No. or Q'ty Part No.
Ref. No. or Q'ty Part No.
                                                                                                                                                                                 SP Description
                                            SP Description
                                                                                                                                                        1-692-348-11 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
                  1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-029-00 s METAL, CHIP 150 5% 1/10W
R303
                                                                                                                                     S74
R304
R305
                                                                                                                                     X1
                                                                                                                                                         1-577-255-11 s OSC, CRYSTAL 8.00 MHz
                   1-223-247-11 s RES, VAR CARBON 10Kx2
1-223-247-11 s RES, VAR CARBON 10Kx2
RV3
RV4
                   1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
 S20
 S21
$22
$23
                    1-571-654-21 s SWITCH, PUSH
                    1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
 S26
                   1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
 S27
 S28
 S29
                     1-692-347-11 s SWITCH, PUSH
 S30
                    1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
 S31
 S32
  S33
  S34
                    1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
  S36
  S37
  S38
                     1-571-654-21 s SWITCH, PUSH
  S39
                     1-692-347-11 s SWITCH, PUSH
1-692-347-11 s SWITCH, PUSH
1-692-347-11 s SWITCH, PUSH
1-692-347-11 s SWITCH, PUSH
  S40
  S41
  S42
  S43
                     1-692-347-11 s SWITCH, PUSH
  S44
                     1-692-347-11 s SWITCH, PUSH
  S45
S46
S47
   S48
                      1-571-653-21 s SWITCH,
   S50
                     1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
   S51
   S52
                      1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
   S53
   S54
                      1-692-348-11 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
   S55
   S56
                      1-571-654-21 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
   S57
   S58
   S59
                      1-692-348-11 s SWITCH, PUSH
   S60
   S61
   S62
   S63
   S64
                      1-692-348-11 s SWITCH, PUSH
   S65
                      1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
1-692-348-11 s SWITCH, PUSH
   S66
   S67
   S68
   S69
```

1-692-348-11 s SWITCH, PUSH 1-692-348-11 s SWITCH, PUSH 1-692-348-11 s SWITCH, PUSH

**S71** 

KY-225 B	DARD	(MY-225 BOARD)
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc 6pcs 6pcs 12pcs	A-8271-687-A O MOUNTED CIRCUIT BOARD, KY-225 2-140-311-04 S KEY TOP 3-178-140-01 O SPACER 4-928-315-01 S KEY TOP	IC24 8-759-930-77 s IC SN74LS247NS IC25 8-759-930-77 s IC SN74LS247NS IC26 8-759-009-06 s IC MC14052BF
C1 C3 C26 C46 C48	1-124-589-11 s ELECT 47uF 20% 16V 1-124-589-11 s ELECT 47uF 20% 16V	ND1 8-719-906-41 s LED GL-9D03D, RED ND2 8-719-906-41 s LED GL-9D03D, RED ND3 8-719-906-41 s LED GL-9D03D, RED ND4 8-719-906-41 s LED GL-9D03D, RED ND5 8-719-906-41 s LED GL-9D03D, RED
CN1	1-506-480-11 s CONNECTOR, 15P, MALE	ND6 8-719-906-41 s LED GL-9D03D, RED
CN2 CN3 CN4 CN5	1-506-480-11 s CONNECTOR, 15P, MALE 1-506-480-11 s CONNECTOR, 15P, MALE 1-506-469-11 s CONNECTOR 4P, MALE 1-506-475-11 s CONNECTOR, 10P, MALE	R1 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R2 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R3 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R4 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R5 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R6 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R7 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
CN6	1-506-469-11 s CONNECTOR 4P, MALE	R6 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
D6 D7 D8 D9 D10	1-506-469-11 s CONNECTOR 4P, MALE 8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN	R7 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R8 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R9 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R10 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
D11	8-719-979-87 s LED LD-701MG, GRN	R12 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
D12 D13 D14 D16	8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN	R13 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R14 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R33 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
D17	8-719-979-87 s LED LD-701MG, GRN	R34 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R35 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
D18 D19 D21 D22	8-719-979-87 s LED LD-701MG, GRN 8-719-979-87 s LED LD-701MG, GRN	R36 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R37 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R38 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
D23 D24 D26 D27 D28	8-719-979-87 S LED LD-701MG, GRN 8-719-979-87 S LED LD-701MG, GRN 8-750-926-11 S LC SN74HC138NS	R39 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R40 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R41 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R42 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R43 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC1	D 135 520 II 5 IO DRITHOLOGIO	
IC2 IC3 IC4 IC5	8-759-926-11 s IC SN74HC138NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS 8-759-926-48 s IC SN74HC244NS	R46 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R47 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R48 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC6	8-759-926-48 s IC SN74HC244NS	R49 1-216-073-00 s METAL, CHIP 10K 5% 1/10W R51 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
IC7 IC8 IC9 IC10	8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS 8-759-926-82 s IC SN74HC574ANS	R52 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R53 1-216-049-00 s METAL, CHIP 1K 5% 1/10W R54 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
IC11	8-759-206-41 s IC TD62083AP	R55 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R56 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
IC12 IC13 IC14 IC15	8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-206-41 s IC TD62083AP	R57 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R58 1-216-097-00 s METAL, CHIP 100K 5% 1/10W R59 1-216-097-00 s METAL, CHIP 100K 5% 1/10W
IC16	8-759-926-82 s IC SN74HC574ANS	R60 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R61 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R62 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W
IC17 IC18 IC19 IC20	8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS 8-759-930-77 s IC SN74LS247NS 8-759-930-77 s IC SN74LS247NS	R63 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R64 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W
IC21	8-759-926-82 s IC SN74HC574ANS	R65 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W R66 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W
IC22 IC23	8-759-206-41 s IC TD62083AP 8-759-926-82 s IC SN74HC574ANS	R67 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W

DFS-500/8 1

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(KY-225 BOARD)
(KY-225 BOARD)
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Ref. No. or Q'ty Part No.
                                                                                                                                                                                                                                                                              or Q'ty Part No.
                                                                                                                                                                                                                                                                                                                                                                    SP Description
                                                                                         SP Description
                                                                                                                                                                                                                                                                                                                   1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
                                      1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-053-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 1.5K 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
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 R70
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  R71
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  R72
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  R73
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                                        1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
1-216-025-00 s METAL, CHIP 100 5% 1/10W
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  R75
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  R76
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   R77
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                                        1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
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   R79
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   R80
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   R81
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    R82
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                                         1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W
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   R84
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    R85
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    R86
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     R87
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                                          1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-025-00 s METAL, CHIP 100 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
    R89
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     R90
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     R91
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     R92
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                                           1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2% 5% 1/10W
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      R94
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      R95
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      R96
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      R97
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      R98
                                           1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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      R99
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      R100
      R101
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1-223-247-11 s RES, VAR CARBON 10Kx2
      R102
      R103
                                             1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/
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      R104
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1-571-654-21 s SWITCH, PUSH
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      R105
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      R106
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1-571-654-21 s SWITCH, PUSH
       R107
                                               1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
                                                                                                                                                                                                                                                                                   S5
       R108
                                             1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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1-571-653-21 s SWITCH, PUSH
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       R109
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       R110
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1-571-654-21 s SWITCH, PUSH
1-571-653-21 s SWITCH, PUSH
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        R111
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        R112
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        R113
                                              1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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1-571-653-21 s SWITCH, PUSH
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        R115
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1-571-653-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
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        R116
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        R117
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        R118
                                              1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
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1-571-654-21 s SWITCH, PUSH
1-571-654-21 s SWITCH, PUSH
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        R119
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        R121
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        R123
                                               1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
         R124
        R125
         R126
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KY-226 BOARD			
Ref. No. or Q'ty	Part No. SP Description		
1pc 4pcs	A-8271-688-A o MOUNTED CIRCUIT BOARD, XY-226 7-685-646-79 s SCREW +BVTP 3X8 TYPE2 N-S		
C1	1-124-589-11 s ELECT 47uF 20% 16V		
CN1	1-506-469-11 s CONNECTOR 4P, MALE		
RV1	1-238-724-11 s RES, VAR(STICK) CARBON 10Kx2		
LE-55B B	OARD		
Ref. No.			
or Q'ty	Part No. SP Description		
1pc 4pcs	1-620-338-11 o PRINTED CIRCUIT BOARD, LE-55 3-674-390-00 o HOLDER (B), LED		
CN1	1-506-482-11 s CONNECTOR 3P, MALE		
D1 D2 D3 D4	8-719-812-32 S LED TLY123, YEL 8-719-812-32 S LED TLY123, YEL 8-719-812-32 S LED TLY123, YEL 8-719-812-32 S LED TLY123, YEL		
R2	1-249-408-11 s CARBON 180 5% 1/4W 1-249-408-11 s CARBON 180 5% 1/4W 1-249-408-11 s CARBON 180 5% 1/4W 1-249-408-11 s CARBON 180 5% 1/4W		

MB-385 BOARD				
Ref. No. or Q'ty	Part No. SP Description			
1pc	A-8271-678-A o MOUNTED CIRCUIT BOARD, MB-385			
28pcs	7-685-871-09 s SCREW +BVTT 3X6 (S)			
CN4	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN5	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN6	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN7	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN8	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN9	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN10	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN11	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN12	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN13	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN14	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN15	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN16	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN18	1-563-337-11 s CONNECTOR, DIN 96P, FEMALE			
CN22	1-506-468-11 s CONNECTOR 3P, MALE			
CN23	1-564-241-00 o CONNECTOR, 4P, MALE			
CN24	1-564-241-00 o CONNECTOR, 4P, MALE			
CN25	1-564-242-00 o CONNECTOR, 5P			



MY-54 BO		(MY-54 B	OARD)
Ref. No.	Part No. SP Description	Ref. No.	Part No. SP Description
1pc 2pcs 2pcs 1pc	A-8271-679-A O MOUNTED CIRCUIT BOARD, MY-54 3-166-184-01 O LEVER, PC BOARD 3-166-185-01 S NUT, PLATE 3-178-157-01 D PLATE, STIERT APTIVE 316	C52 C53 C54 C55 C56	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
2pcs 2pcs 6pcs	7-622-207-05 s N 2.6, TYPE 2 7-626-320-11 s PIN, SPRING 3X8 7-628-254-40 s SCREW +PS 2.6X12	C57 C58 C59 C60	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C1 C2 C3 C4 C5	7-622-207-05 s N 2.6, TYPE 2 7-626-320-11 s PIN, SPRING 3X8 7-628-254-40 s SCREW +PS 2.6X12  1-161-055-00 s CERAMIC 0.022UF 10% 50V	C61 C62 C63 C64 C65	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C6 C7	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C66	1-161-055-00 s CERAMIC 0.022uF 10% 50V
C8 C10 C11	1-161-055-00 S CERAMIC 0.022UF 10% 50V 1-161-055-00 S CERAMIC 0.022UF 10% 50V 1-161-055-00 S CERAMIC 0.022UF 10% 50V	C67 C68 C69 C70	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C12 C13 C14 C15 C16	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C72 C73 C74	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C17 C18	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C75 C76	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C19 C20 C21	1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V	C77 C78 C79 C80	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C22 C23 C24 C25 C26	1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V	C81 C82 C83 C84	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C27 C28			1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C29 C30 C31	1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V	C89 C90	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C32 C33 C34 C35 C36	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C91 C92 C93 C94 C95	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C37 C38 C39 C40 C41	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C96 C97 C98 C99	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C42 C43	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C100 C101	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C44 C45 C46	1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V 1-161-055-00 s CERAMIC 0.022UF 10% 50V	C102 C103 C104 C105	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C47 C48 C49 C50	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V	C106 C107 C108	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
C51	1-161-055-00 s CERAMIC 0.022uF 10% 50V	C109 C110	1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V

(MY-54 BOARD)	(MY-54 BOARD)	
Ref. No.	Ref. No.	
or Q'ty Part No. SP Description	or Q'ty Part No. SP Description	
C111 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC46 8-752-333-41 s IC CXX54256P-35	
C112 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC47 8-752-333-41 s IC CXX54256P-35	
C113 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC48 8-752-333-41 s IC CXX54256P-35	
C120 1-124-584-00 s ELECT 100uF 20% 10V	IC49 8-752-333-41 s IC CXX54256P-35	
C121 1-124-584-00 s ELECT 100uF 20% 10V	IC50 8-752-333-41 s IC CXX54256P-35	
C122 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC51 8-752-333-41 s IC CXK54256P-35	
C123 1-124-584-00 s ELECT 100uF 20% 10V	IC52 8-752-333-41 s IC CXK54256P-35	
C124 1-124-584-00 s ELECT 100uF 20% 10V	IC53 8-752-333-41 s IC CXK54256P-35	
C125 1-124-584-00 s ELECT 100uF 20% 10V	IC54 8-752-333-41 s IC CXK54256P-35	
C126 1-124-584-00 s ELECT 100uF 20% 10V	IC55 8-759-063-39 s IC CXD8267Q	
C127 1-124-584-00 s ELECT 100uF 20% 10V  CN7 1-506-748-11 o CONNECTOR, DIN 96P, MALE CN8 1-506-748-11 o CONNECTOR, DIN 96P, MALE CN9 1-506-748-11 o CONNECTOR, DIN 96P, MALE	IC56 8-759-063-39 s IC CXD8267Q IC57 8-759-063-40 s IC CXD8266Q IC58 8-759-063-40 s IC CXD8266Q IC59 8-752-333-59 s IC CXX58258SP-35 IC60 8-752-333-59 s IC CXX58258SP-35	
IC1 8-759-902-44 s IC SN74LS244N	IC61 8-752-333-59 s IC CXK58258SP-35	
IC2 8-759-902-44 s IC SN74LS244N	IC62 8-752-333-59 s IC CXK58258SP-35	
IC3 8-759-902-44 s IC SN74LS244N	IC63 8-752-333-59 s IC CXK58258SP-35	
IC4 8-759-902-44 s IC SN74LS244N	IC64 8-752-333-59 s IC CXK58258SP-35	
IC6 8-759-900-32 s IC SN74LS32N	IC66 8-752-333-59 s IC CXX58258SP-35	
IC7 8-759-901-75 s IC SN74LS175N	IC67 8-759-063-39 s IC CXD8267Q	
IC8 8-759-900-32 s IC SN74LS32N	IC68 8-759-063-39 s IC CXD8267Q	
IC10 8-759-936-54 s IC SN74ALS175N	IC69 8-759-063-40 s IC CXD8266Q	
IC11 8-759-900-04 s IC SN74LS04N	IC70 8-759-063-40 s IC CXD8266Q	
IC12 8-759-936-54 S IC SN74ALS175N	IC71 8-759-063-40 s IC CXD8266Q	
IC13 8-759-904-18 S IC SN74ALS00AN	IC72 8-759-063-40 s IC CXD8266Q	
IC14 8-759-912-03 S IC SN74ALS138N	IC73 8-752-333-48 s IC CXK5464AP-35	
IC15 8-759-912-03 S IC SN74ALS138N	IC74 8-752-333-48 s IC CXK5464AP-35	
IC16 8-759-901-74 S IC SN74LS174N	IC75 8-752-333-48 s IC CXK5464AP-35	
IC5       8-759-988-55       s IC SN74ALS244BN         IC6       8-759-900-32       s IC SN74LS32N         IC7       8-759-901-75       s IC SN74LS175N         IC8       8-759-900-32       s IC SN74LS32N         IC10       8-759-936-54       s IC SN74LS175N         IC11       8-759-900-04       s IC SN74LS04N         IC12       8-759-904-18       s IC SN74ALS175N         IC13       8-759-912-03       s IC SN74ALS138N         IC14       8-759-912-03       s IC SN74ALS138N         IC15       8-759-912-03       s IC SN74LS174N         IC16       8-759-901-74       s IC SN74LS174N         IC17       8-759-901-74       s IC SN74LS174N         IC18       8-759-903-74       s IC SN74LS374N         IC20       8-759-963-39       s IC CXD8033Q         IC21       8-759-983-24       s IC CXD8033Q         IC22       8-759-983-24       s IC CXD8033Q         IC23       8-759-983-24       s IC CXD8033Q         IC24       8-759-983-24       s IC CXD8033Q         IC25       8-759-515-08       s IC SN74ALS139N         IC26       8-759-515-08       s IC SN74ALS139N	IC76 8-752-333-48 s IC CXX5464AP-35 IC77 8-752-333-48 s IC CXX5464AP-35 IC78 8-752-333-48 s IC CXX5464AP-35 IC79 8-752-333-48 s IC CXX5464AP-35 IC80 8-752-333-48 s IC CXX5464AP-35	
IC22 8-759-983-24 s IC CXD8033Q	IC81 8-752-333-48 s IC CXX5464AP-35	
IC23 8-759-983-24 s IC CXD8033Q	IC82 8-752-333-48 s IC CXX5464AP-35	
IC24 8-759-997-10 s IC SN74ALS139N	IC83 8-752-333-48 s IC CXX5464AP-35	
IC25 8-759-515-08 s IC SN74ALS374AN	IC84 8-752-333-48 s IC CXX5464AP-35	
IC26 8-759-900-00 s IC SN74LS00N	IC85 8-752-333-48 s IC CXX5464AP-35	
IC27 8-759-900-32 s IC SN74LS32N	IC86 8-752-333-48 s IC CXX5464AP-35	
IC28 8-759-900-74 s IC SN74LS74AN	IC87 8-752-333-48 s IC CXX5464AP-35	
IC29 8-759-900-08 s IC SN74LS08N	IC88 8-752-333-48 s IC CXX5464AP-35	
IC30 8-759-900-08 s IC SN74LS08N	IC89 8-759-063-39 s IC CXD8267Q	
IC31 8-759-900-08 s IC SN74LS08N	IC90 8-759-063-39 s IC CXD8267Q	
IC32 8-759-900-08 s IC SN74LS08N IC33 8-759-900-08 s IC SN74LS08N IC34 8-759-900-08 s IC SN74LS08N IC35 8-759-063-40 s IC CXD8266Q IC36 8-759-063-40 s IC CXD8266Q	IC91 8-759-500-72 s IC SN74ALS157AN IC92 8-759-500-72 s IC SN74ALS157AN IC93 8-759-500-72 s IC SN74ALS157AN IC94 8-759-500-72 s IC SN74ALS157AN IC95 8-759-916-01 s IC SN74ALS153N	
IC37 8-759-063-40 s IC CXD8266Q IC38 8-759-063-40 s IC CXD8266Q IC39 8-752-333-41 s IC CXX54256P-35 IC40 8-752-333-41 s IC CXX54256P-35 IC41 8-752-333-41 s IC CXX54256P-35	IC96 8-759-903-74 s IC SN74LS374N IC97 8-759-903-74 s IC SN74LS374N IC98 8-759-063-41 s IC CXD8265Q IC99 8-759-063-41 s IC CXD8265Q IC100 8-759-063-41 s IC CXD8265Q	
IC42 8-752-333-41 s IC CXK54256P-35	IC101 8-759-063-41 s IC CXD8265Q	
IC43 8-752-333-41 s IC CXK54256P-35	IC102 8-759-904-79 s IC 74F00PC	
IC44 8-752-333-41 s IC CXK54256P-35	IC103 8-759-904-81 s IC 74F08PC	
IC45 8-752-333-41 s IC CXK54256P-35	IC104 8-759-946-64 s IC SN74ALS04BN	

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(MY-54 BOARD)
Ref. No. or Q'ty Part No.
                                            SP Description
                   8-759-946-64 S IC SN74ALS04BN
8-759-500-72 S IC SN74ALS157AN
8-759-903-74 S IC SN74LS374N
8-759-901-75 S IC SN74LS175N
8-759-903-97 S IC SN74LS684N
IC106
 IC107
 IC108
IC109
                   8-759-936-53 s IC SN74ALS151N
8-759-904-83 s IC 74F32PC
8-759-904-83 s IC 74F32PC
8-759-901-64 s IC SN74LS164N
 IC110
 IC111
IC112
                    1-412-525-31 s INDUCTOR 10uH
L1
                1-532-675-00 s LINK, IC 1.5A
 PS1
                    1-249-441-11 s CARBON 100K 5% 1/4W 1-249-441-11 s CARBON 100K 5% 1/4W
 R1
 R2
 R3
 R4
                     1-249-441-11 s CARBON 100K 5% 1/4W
 R5
                     1-249-441-11 s CARBON 100K 5% 1/4W
 R6
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
1-231-411-00 s RESISTOR BLOCK 100Kx8
 RB1
  RB2
                     1-231-411-00 S RESISTOR BLOCK 100Kx8
  RB3
  RB4
  RB5
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB6
  RB7
  RB8
  RB10
                     1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB11
                      1-231-411-00 s RESISTOR BLOCK 100Kx8
  RB12
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PU-78 BOARD				
Ref. No. or Q'ty	Part No. SP Description			
1pc	A-8271-683-A O MOUNTED CIRCUIT BOARD, PU-78			
2pcs	3-166-184-01 O LEVER, PC BOARD			
2pcs	3-166-185-01 S NUT, PLATE			
1pc	3-178-157-01 O PLATE, SHIELD			
8pcs	4-886-821-11 S SCREW, S TIGHT, +PTTWH 3X6			
2pcs	7-622-207-05 s N 2.6, TYPE 2			
2pcs	7-626-320-11 s PIN, SPRING 3X8			
6pcs	7-628-254-40 s SCREW +PS 2.6X12			
C1	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C2	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C3	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C4	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C5	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C6	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C7	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C8	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C9	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C10	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C11	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C12	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C13	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C14	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C15	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C16	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C17	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C18	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C19	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C20	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C21	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C22	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C23	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C24	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C25	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C26	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C27	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C28	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C29	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C30	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C31	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C32	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C33	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C34	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C35	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C36	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C37	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C38	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C39	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C40	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C41	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C42	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C43	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C44	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C45	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C46	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C47	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C48	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C49	1-161-055-00 s CERAMIC 0.022uF 10% 50V			
C50	1-161-055-00 s CERAMIC 0.022uF 10% 50V			

(PU-78 BOARD)	(PU-78 BOARD)	
Ref. No. or Q'ty Part No. SP Description	Ref. No. or Q'ty Part No. SP Description	
Or Q'ty Part No. SP Description  C51	IC19 8-759-989-55 s IC SN74ALS244BN IC20 8-759-989-55 s IC SN74ALS244BN IC21 8-759-989-55 s IC SN74ALS244BN IC22 8-759-989-55 s IC SN74ALS244BN IC23 8-752-322-06 s IC CXK5814P-35	
C56 1-161-055-00 s CERAMIC 0.022uF 10% 50V C57 1-161-055-00 s CERAMIC 0.022uF 10% 50V C58 1-161-055-00 s CERAMIC 0.022uF 10% 50V C59 1-161-055-00 s CERAMIC 0.022uF 10% 50V C60 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC24 8-752-322-06 s IC CXX5814P-35 IC25 8-759-983-25 s IC CXD8031Q IC26 8-759-983-25 s IC CXD8031Q IC27 8-759-983-25 s IC CXD8031Q IC28 8-759-983-25 s IC CXD8031Q	
C61 1-161-055-00 s CERAMIC 0.022uF 10% 50V C62 1-161-055-00 s CERAMIC 0.022uF 10% 50V C63 1-161-055-00 s CERAMIC 0.022uF 10% 50V C64 1-161-055-00 s CERAMIC 0.022uF 10% 50V C65 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC29 8-759-989-55 s IC SN74ALS244BN IC30 8-759-989-55 s IC SN74ALS244BN IC31 8-759-989-55 s IC SN74ALS244BN IC32 8-752-322-06 s IC CXK5814P-35 IC33 8-752-322-06 s IC CXK5814P-35	
C66 1-161-055-00 s CERAMIC 0.022uF 10% 50V C67 1-161-055-00 s CERAMIC 0.022uF 10% 50V C68 1-161-055-00 s CERAMIC 0.022uF 10% 50V C69 1-161-055-00 s CERAMIC 0.022uF 10% 50V C70 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC34 8-759-989-55 s IC SN74ALS244BN IC35 8-759-989-55 s IC SN74ALS244BN IC36 8-759-989-55 s IC SN74ALS244BN IC37 8-759-989-55 s IC SN74ALS244BN IC38 8-759-989-55 s IC SN74ALS244BN	
C71 1-161-055-00 s CERAMIC 0.022uF 10% 50V C72 1-161-055-00 s CERAMIC 0.022uF 10% 50V C73 1-161-055-00 s CERAMIC 0.022uF 10% 50V C74 1-161-055-00 s CERAMIC 0.022uF 10% 50V C75 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC39 8-759-989-55 s IC SN74ALS244BN IC40 8-752-324-60 s IC CXK5863P-25 IC41 8-752-324-60 s IC CXK5863P-25 IC42 8-752-324-60 s IC CXK5863P-25 IC43 8-752-324-60 s IC CXK5863P-25	
C76 1-124-584-00 S ELECT 100uF 20% 10V C77 1-124-584-00 S ELECT 100uF 20% 10V C78 1-161-772-11 S CERAMIC 0.1uF 10% 25V C79 1-124-584-00 S ELECT 100uF 20% 10V C80 1-124-584-00 S ELECT 100uF 20% 10V	IC44 8-759-989-55 s IC SN74ALS244BN IC45 8-759-989-55 s IC SN74ALS244BN IC46 8-759-989-55 s IC SN74ALS244BN IC47 8-759-989-55 s IC SN74ALS244BN IC48 8-759-500-72 s IC SN74ALS157AN	
C81 1-124-584-00 s ELECT 100uF 20% 10V C82 1-124-584-00 s ELECT 100uF 20% 10V C83 1-124-584-00 s ELECT 100uF 20% 10V C101 1-161-055-00 s CERAMIC 0.022uF 10% 50V C102 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC49 8-759-500-72 s IC SN74ALS157AN IC50 8-759-500-72 s IC SN74ALS157AN IC51 8-759-500-72 s IC SN74ALS157AN IC52 8-759-901-64 s IC SN74LS164N IC53 8-759-904-38 s IC SN74ALS32N	
C103 1-161-055-00 s CERAMIC 0.022uF 10% 50V C104 1-161-055-00 s CERAMIC 0.022uF 10% 50V	IC54 8-759-904-38 s IC SN74ALS32N IC55 8-759-505-01 s IC CXD8054	
CN10 1-506-748-11 o CONNECTOR, DIN 96P, MALE CN11 1-506-748-11 o CONNECTOR, DIN 96P, MALE	IC56 8-759-505-01 s IC CXD8054 IC57 8-759-063-44 s IC CXD8262Q IC58 8-759-063-44 s IC CXD8262Q	
CN12 1-506-748-11 o CONNECTOR, DIN 96P, MALE  IC1 8-759-989-55 s IC SN74ALS244BN IC2 8-759-989-55 s IC SN74ALS244BN IC3 8-759-989-55 s IC SN74ALS244BN IC4 8-759-989-55 s IC SN74ALS244BN IC5 8-759-989-55 s IC SN74ALS244BN	IC59 8-759-063-44 S IC CXD8262Q IC60 8-759-063-44 S IC CXD8262Q IC61 8-759-088-19 o IC PAL16L8-NPPSL61V1.01, PLD IC62 8-759-904-38 S IC SN74ALS32N IC63 8-759-904-38 S IC SN74ALS32N	
IC6 8-759-946-64 s IC SN74ALS04BN IC7 8-759-945-73 s IC SN74ALS10AN IC8 8-759-912-03 s IC SN74ALS138N IC9 8-759-912-03 s IC SN74ALS138N IC10 8-759-912-03 s IC SN74ALS138N	IC64 8-759-906-78 s IC 74F399PC IC85 8-759-500-72 s IC SN74ALS157AN IC66 8-759-500-72 s IC SN74ALS157AN IC67 8-759-515-08 s IC SN74ALS374AN IC68 8-759-063-39 s IC CXD8267Q	
IC11 8-759-904-38 s IC SN74ALS32N IC12 8-759-904-26 s IC SN74ALS08N IC13 8-759-500-72 s IC SN74ALS157AN IC14 8-759-515-08 s IC SN74ALS374AN IC15 8-759-900-69 s IC SN74ALS74AN	IC69 8-759-906-78 s IC 74F399PC IC70 8-759-063-39 s IC CXD8267Q IC71 8-759-906-78 s IC 74F399PC IC72 8-759-063-39 s IC CXD8267Q IC73 8-759-906-78 s IC 74F399PC	
IC16 8-759-900-69 s IC SN74ALS74AN IC17 8-759-983-24 s IC CXD8033Q IC18 8-759-063-42 s IC CXD8264Q	IC74 8-759-063-39 s IC CXD8267Q IC75 8-759-906-78 s IC 74F399PC IC101 8-759-901-64 s IC SN74LS164N IC102 8-759-901-64 s IC SN74LS164N	



(PU-78 BOARD)

Ref. No. or Q'ty Part No. SP Description

IC103 8-759-901-64 s IC SN74LS164N 
IC104 8-759-904-38 s IC SN74ALS32N

L1 1-412-525-31 s INDUCTOR 10uH

PS1 A1-532-675-00 s LINK, IC 1.5A

RB1 1-231-410-00 s RESISTOR BLOCK 10Kx8
RB2 1-231-410-00 s RESISTOR BLOCK 10Kx8
RB3 1-231-410-00 s RESISTOR BLOCK 10Kx8
S1 1-554-080-00 s SWITCH, DIGITAL S2 1-554-080-00 s SWITCH, DIGITAL

SY-172/SY-172P BOARD

Ref. No. or Q'ty	Part No.	SP	Description	
1pc	A-8271-682-	-A o	MOUNTED CIRCUIT	BOARD, SY-172
1pc	A-8271-695-	A o	(for DFS-500) MOUNTED CIRCUIT (for DFS-500P)	BOARD, SY-172E
2pcs 1pc 8pcs 4pcs 2pcs	3-166-184-0 3-178-157-0 4-886-821-1 7-622-207-0 7-626-320-1	01 0 01 0 11 s 05 s 11 s	LEVER, PC BOARD PLATE, SHIELD SCREW, S TIGHT N 2.6, TYPE 2 PIN, SPRING 3X	) , +PTTWH 3X6 3
4pcs	7-628-254-4	40 s	SCREW +PS 2.6X	12
			BATTERY, NICKE	
C1 C2 C3 C4 C5	1-161-055-0	00 s	CERAMIC 0.022ul CERAMIC 0.022ul CERAMIC 0.022ul CERAMIC 0.022ul CERAMIC 0.022ul	7 10% 50V
C6 C7 C8 C9 C10	1-161-055-1 1-161-055-1 1-161-055-1 1-161-055-1	00 s 00 s 00 s 00 s	CERAMIC 0.022ul CERAMIC 0.022ul CERAMIC 0.022ul CERAMIC 0.022ul CERAMIC 0.022ul	F 10% 50V F 10% 50V F 10% 50V F 10% 50V F 10% 50V
C11 C12 C13 C14 C15	1-161-055- 1-161-055-	00 s 00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V F 10% 50V
C16 C17 C18 C19 C20	1-161-055- 1-161-055-	00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V
C21 C22 C23 C24 C25	1-161-055- 1-161-055- 1-161-055-	00 s 00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V F 10% 50V
C26 C27 C28 C29 C30	1-161-055- 1-161-055- 1-161-055-	00 s 00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V F 10% 50V
C31 C32 C33 C34 C35	1-161-055- 1-161-055-	00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V F 10% 50V
C36 C37 C38 C39 C40	1-161-055- 1-161-055- 1-161-055-	00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V F 10% 50V
C41 C42 C43 C44 C45	1-161-055- 1-161-055- 1-161-055-	00 s 00 s 00 s	CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u CERAMIC 0.022u	F 10% 50V F 10% 50V F 10% 50V
C46	1-161-055-	00 s	CERAMIC 0.022u	F 10% 50V

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(SY-172/SY-172P BOARD)
                                                                                                                                                                      (SY-172/SY-172P BOARD)
Ref. No. or Q'ty Part No.
                                                                                                                                                                      Ref. No.
                                                                                                                                                                      or Q'ty Part No.
                                                         SP Description
                                                                                                                                                                                                                             SP Description
                       1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-055-00 s CERAMIC 0.022uF 10% 50V
                                                                                                                                                                                             8-752-803-58 s IC CXQ70116P-10
8-759-902-45 s IC SN74LS245N
8-759-902-45 s IC SN74LS245N
8-759-903-75 s IC SN74LS375N
8-759-903-73 s IC SN74LS373N
                                                                                                                                                                      IC9
                                                                                                                                                                       IC10
C48
                                                                                                                                                                      IC11
IC12
C49
C50
                                                                                                                                                                       IC13
 C51
                        1-161-055-00 S CERAMIC 0.022UF 10% 50V
                                                                                                                                                                                             8-759-903-73 s IC SN74LS373N
8-759-900-10 s IC SN74LS10N
8-759-502-77 s IC SN74LS139AN
8-759-900-32 s IC SN74LS32N
                                                                                                                                                                      IC14
IC15
IC16
 C52
 C53
 C54
                                                                                                                                                                       IC17
 C55
                                                                                                                                                                       IC18
                                                                                                                                                                                              8-759-900-20 s IC SN74LS20N
 C56
                        1-161-055-00 s CERAMIC 0.022uF 10% 50V 1-161-772-11 s CERAMIC 0.1uF 10% 25V
                                                                                                                                                                                             8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
8-759-900-21 s IC SN74LS21N
8-752-328-05 s IC CXK5864BSP-70L
                                                                                                                                                                       IC19
 C57
                                                                                                                                                                       IC20
IC21
 C58
C59
                                                                                                                                                                       IC22
 C60
 C61
                         1-161-055-00 s CERAMIC 0.022uF 10% 50V
1-161-772-11 s CERAMIC 0.1uF 10% 25V
1-161-055-00 s CERAMIC 0.022uF 10% 50V
1-124-584-00 s ELECT 100uF 20% 10V
1-161-055-00 s CERAMIC 0.022uF 10% 50V
                                                                                                                                                                                             8-752-328-05 s IC CXK5864BSP-70L
8-759-902-44 s IC SN74LS244N
8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
8-759-900-74 s IC SN74LS74AN
 C62
                                                                                                                                                                      IC25
IC26
IC27
 C63
 C64
 C65
                                                                                                                                                                       IC28
  C66
                         1-124-584-00 s ELECT 100uF 20% 10V
                                                                                                                                                                                              8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
                                                                                                                                                                       IC29
                                                                                                                                                                       IC30
  C68
                                                                                                                                                                                              8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
8-759-903-74 s IC SN74LS374N
                                                                                                                                                                       IC31
IC32
  C69
  C70
  C71
                                                                                                                                                                       IC33
                                                                                                                                                                                              8-759-902-44 s IC SN74LS244N
                          1-124-584-00 s ELECT 100uF 20% 10V
1-161-055-00 s CERAMIC 0.022uF 10% 50V
  C72
                                                                                                                                                                       IC35
IC36
  C73
                          1-506-748-11 o CONNECTOR, DIN 96P, MALE
1-506-748-11 o CONNECTOR, DIN 96P, MALE
                                                                                                                                                                       IC37
                                                                                                                                                                       IC38
  CN18
                          1-526-659-00 o SOCKET, IC 28P
1-526-660-21 o SOCKET, IC 32P
                                                                                                                                                                                              8-759-902-44 s IC SN74LS244N
8-752-803-58 s IC CXQ70116P-10
8-759-902-45 s IC SN74LS245N
8-759-902-45 s IC SN74LS245N
                                                                                                                                                                       IC39
  CNI1
CNI2
CNI3
                                                                                                                                                                       IC40
                                                                                                                                                                       IC41
IC42
   CNI4
                                                                                                                                                                       IC43
                                                                                                                                                                                              8-759-903-75 s IC SN74LS375N
   CNI5
                                                                                                                                                                                              8-759-903-73 s IC SN74LS373N
8-759-903-73 s IC SN74LS373N
8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
8-759-901-38 s IC SN74LS138N
                                                                                                                                                                       TC44
                          1-526-660-21 0 SOCKET, IC 32P
1-526-660-21 0 SOCKET, IC 32P
1-526-660-21 0 SOCKET, IC 32P
                                                                                                                                                                       IC45
IC46
IC47
   CNI7
   CNI8
                                                                                                                                                                        IC48
                          8-719-911-19 s DIODE 1SS119
   D1
                          8-759-088-11 o IC 27C256-NPSYS1V1.01, EPROM
8-759-088-12 o IC 27C256-NPSYS2V1.01, EPROM
8-759-088-13 o IC 27C512-NPSYS3V1.01, EPROM
8-759-088-14 o IC 27C512-NPSYS4V1.01, EPROM
8-759-088-15 o IC 27C4001-NTEFC5V1.01, EPROM
(for UC)
8-759-093-64 o IC 27C4001-PLEFC5V3.01, EPROM
(for EK)
                                                                                                                                                                                              8-759-900-20 s IC SN74LS20N
8-759-900-32 s IC SN74LS32N
8-752-806-91 s IC CXQ71054P
8-759-105-76 s IC UPD71059C
                                                                                                                                                                       IC49
                                                                                                                                                                       IC50
IC51
IC52
   IC2
IC3
IC4
                                                                                                                                                                                              8-759-107-51 s IC CXQ71051P
                                                                                                                                                                        IC53
    IC5
                                                                                                                                                                                              8-759-107-51 s IC CXQ71051P
8-759-902-44 s IC SN74LS244N
                                                                                                                                                                       IC54
                                                                                                                                                                        IC55
                                                                                                                                                                                              8-759-902-44 s IC SN74LS244N
8-759-902-44 s IC SN74LS244N
8-759-926-32 s IC AM26LS32PC
8-759-926-31 s IC AM26LS31PC
                                                                                                                                                                        IC56
                           8-759-088-16 o IC 27C4001-NTEFC6V1.01, EPROM
                                                                                                                                                                        IC57
    IC6
                          8-759-093-65 o IC 27C4001-PLEFC6V3.01, EPROM
(for EK)
                                                                                                                                                                        IC58
                                                                                                                                                                                             8-752-328-05 s IC CXK5864BSP-70L
8-752-328-05 s IC CXK5864BSP-70L
8-752-328-05 s IC CXK5864BSP-70L
8-752-328-05 s IC CXK5864BSP-70L
8-759-505-28 s IC MAX691CPE
                                                                                                                                                                       IC60
                                                                                                                                                                       IC61
                           8-759-088-17 o IC 27C4001-NTEFC7V1.01, EPROM
   IC7
                          (for UC)
8-759-093-66 o IC 27C4001-PLEFC7V3.01, EPROM
(for EK)
                                                                                                                                                                        IC62
                                                                                                                                                                        IC63
                                                                                                                                                                       IC64
                                                                                                                                                                                              8-759-902-44 s IC SN74LS244N
                           8-759-088-18 o IC 27C4001-NTEFC8V1.01, EPROM
    IC8
                           (for UC)
8-759-093-67 o IC 27C4001-PLEFC8V3.01, EPROM
                                                                                                                                                                                             1-412-525-31 s INDUCTOR 10uH
                                                                   (for EK)
```



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VR-136 BOARD
(SY-172/SY-172P BOARD)
                                                                                                                     Ref. No.
Ref. No.
                                                                                                                     or Q'ty Part No.
                                                                                                                                                            SP Description
                                       SP Description
or Q'ty Part No.
                                                                                                                                      1-644-611-11 O PRINTED CIRCUIT BOARD, VR-136
                                                                                                                     1pc
             ↑1-532-675-00 s LINK, IC 1.5A
                                                                                                                                      1-124-589-11 S ELECT 47UF 20% 16V
1-161-485-00 S CERAMIC 0.1UF 50V
                                                                                                                      C1
                 8-729-195-23 s TRANSISTOR 2SA952
Q1
                                                                                                                      C2
                 1-249-429-11 s CARBON 10K 5% 1/4W 1-249-419-11 s CARBON 1.5K 5% 1/4W 1-249-405-11 s CARBON 100 5% 1/4W 1-249-419-11 s CARBON 1.5K 5% 1/4W 1-249-419-11 s CARBON 1.5K 5% 1/4W
                                                                                                                      C3
                                                                                                                      C4
R2
                                                                                                                      C5
R3
 R4
                                                                                                                      C6
                                                                                                                                       1-161-485-00 s CERAMIC 0.1uF 50V
 R5
                                                                                                                                      1-223-247-11 s RES, VAR CARBON 10Kx2
1-223-247-11 s RES, VAR CARBON 10Kx2
                 1-249-405-11 s CARBON 100 5% 1/4W
1-249-419-11 s CARBON 1.5% 5% 1/4W
1-249-411-11 s CARBON 330 5% 1/4W
                                                                                                                      RV1
                                                                                                                      RV2
 R7
 R8
                                                                                                                      CN1
                                                                                                                                       1-506-489-11 s CONNECTOR 10P, MALE
                 1-235-351-11 s RESISTOR BLOCK 2.2Kx4
1-235-351-11 s RESISTOR BLOCK 2.2Kx4
1-231-410-00 s RESISTOR BLOCK 10Kx8
 RR1
 RB2
 RB3
                  1-231-410-00 s RESISTOR BLOCK 10Kx8
 RB4
                  1-570-674-11 s SWITCH, SLIDE
1-554-027-00 s SWITCH, DIGITAL
1-570-598-11 s SWITCH, DIP 4-CKT
 S1
                                                                                                                      VR-137 BOARD
 S2
 S3
                                                                                                                      Ref. No. or Q'ty Part No.
                                                                                                                                                             SP Description
                  1-577-337-11 s OSC, CRYSTAL 10.00 MHz 1-577-255-11 s OSC, CRYSTAL 8.00 MHz
                                                                                                                                       1-644-612-11 o PRINTED CIRCUIT BOARD, VR-137
                                                                                                                       1pc
                                                                                                                                       1-124-589-11 s ELECT 47uF 20% 16V
1-161-485-00 s CERAMIC 0.1uF 50V
                                                                                                                      C2
C3
C4
C5
  VR-135 BOARD
                                                                                                                                       1-161-485-00 s CERAMIC 0.1uF 50V
1-161-485-00 s CERAMIC 0.1uF 50V
1-161-485-00 s CERAMIC 0.1uF 50V
  Ref. No.
 or Q'ty Part No.
                                         SP Description
                                                                                                                       C8
                                                                                                                                       1-161-485-00 s CERAMIC 0.1uF 50V
1-161-485-00 s CERAMIC 0.1uF 50V
                                                                                                                       C9
                   1-644-610-11 o PRINTED CIRCUIT BOARD, VR-135
  3pcs
                                                                                                                       C10
                   1-124-589-11 S ELECT 47uF 20% 16V
1-161-485-00 S CERAMIC 0.1uF 50V
1-161-485-00 S CERAMIC 0.1uF 50V
1-161-485-00 S CERAMIC 0.1uF 50V
                                                                                                                                       1-161-485-00 s CERAMIC 0.1uF 50V
                                                                                                                       C11
  C2
  C4
C5
                                                                                                                       CN1
                                                                                                                                       1-506-489-11 s CONNECTOR 10P, MALE
                                                                                                                                       1-223-247-11 s RES, VAR CARBON 10Kx2
1-223-247-11 s RES, VAR CARBON 10Kx2
1-223-247-11 s RES, VAR CARBON 10Kx2
                                                                                                                       RV1
                   1-506-483-21 s CONNECTOR, 4P, MALE
  CN1
                                                                                                                       RV2
```

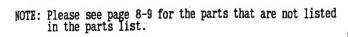
1-223-247-11 s RES, VAR CARBON 10Kx2

RV1

RV3

VR-138 B	OARD	FRAME
Ref. No. or Q'ty	Part No. SP Description	Ref. No. or Q'ty Part No. SP Description
1pc	1-644-613-11 o PRINTED CIRCUIT BOARD, VR-	138 M1 1-541-329-31 s MOTOR, FAN
C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C12	1-124-589-11 S ELECT 47uF 20% 16V 1-161-485-00 S CERAMIC 0.1uF 50V	\$101 \( \frac{\Lambda}{1} - 570 - 117 - 41 \) s SWITCH, ROCKER (AC POWER)  1pc \( \frac{\Lambda}{1} - 413 - 776 - 11 \) s REGULATOR, SWITCHING SSOG1213  1pc \( \frac{\Lambda}{1} - 413 - 776 - 21 \) s REGULATOR, SWITCHING  1pc \( 1 - 466 - 182 - 11 \) s ENCODER, ROTARY (MAGNETIC)  1pc \( 1 - 574 - 992 - 11 \) s CABLE, FLAT 25P  ("CONTROL PANEL" to CN1/KY - 223 board)  1pc \( \frac{\Lambda}{1} - 580 - 375 - 11 \) s INLET, AC 3P, MALE  1pc \( \frac{\Lambda}{1} - 950 - 804 - 11 \) o HARNESS (ACW - 500)  1pc \( \frac{\Lambda}{1} - 950 - 974 - 11 \) o HARNESS (ACW - 500PA)  1pc \( \frac{\Lambda}{1} - 950 - 975 - 11 \) o HARNESS (ACW - 500PA)  1pc \( \frac{\Lambda}{1} - 951 - 147 - 11 \) o HARNESS (KY - 4)
C14	1-161-485-00 s CERAMIC 0.1uF 50V	HARNESS'S CHILD PARTS
RV1 RV2 RV3 RV4	RV2 1-223-247-11 s RES, VAR CARBON 10KX2 RV3 1-223-247-11 s RES, VAR CARBON 10KX2	HARNESS KY-1: (CN1F/KY-226 board to CN4F/KY-225 board) (CN1F/VR-135 board to CN6F/KY-225 board) (CN1F/VR-135 board to CN5F/KY-223 board) (CN1F/VR-135 board to CN6F/KY-223 board) Unstock parts  HARNESS KY-2: (CN1F/VR-136 board to CN5F/KY-225 board) (CN1F/VR-137 board to CN7F/KY-223 board) (CN1F/VR-138 board to CN8F/KY-223 board) Unstock parts  HARNESS KY-3: (CN1F/KY-225 board to CN2F/KY-223 board) (CN2F/KY-225 board to CN3F/KY-223 board) (CN3F/KY-225 board to CN3F/KY-223 board) Unstock parts
		HARNESS KY-4: (KY-223 board to KY-225 board) 1pc A1-535-340-11 o CONTACT  HARNESS DCW-500: (CN1/LE-55B board to CN22/MB-385 board) CN1F 1-569-196-31 o HOUSING 3P 1-569-193-11 o CONTACT, FEMALE CN2F 1-569-196-11 o HOUSING, CONNECTOR 3P 1-569-193-11 o CONTACT, FEMALE





## PACKING MATERIALS & SUPPLIED ACCESSORIES

```
Ref. No. or Q'ty Part No.
                                                            SP Description
                   ↑1-534-754-00 s CORD POWER, 2P (for J)
↑1-557-377-11 s CORD, POWER (for UC)
↑1-590-910-11 s CORD, POWER 3P (for EK)
1-696-660-11 o CABLE, D-SUB 25P(DIGITAL VIDEO)10m
2-990-242-01 s HOLDER (B), PLUG (for J, UC)
 1pc
 1pc
 1pc
 1pc
                         3-170-078-01 o HOLDER (B), PLUG (for EK)
3-177-560-01 o CHIP (B), SW
3-178-159-01 o INDIVIDUAL CARTON (for J, UC)
3-178-171-01 o CUSHION (INNER)
3-178-172-01 o CUSHION (UPPER)
 1pc
  1pc
 1pc
                    3-178-174-01 o CUSHION
3-178-513-01 o INDIVIDUAL CARTON (for EK)
3-701-634-00 o BAG, POLYETHYLENE
3-755-938-01 s MANUAL, INSTRUCTION (for J)
▲3-755-938-21 s MANUAL, INSTRUCTION (for UC, EK)
  1pc
  1pc
  1pc
  1pc
                          3-755-938-31 s MANUAL, INSTRUCTION (for UC, 3-755-938-41 s MANUAL, INSTRUCTION (for EK)
 1pc
1pc
```

## 8-4. OPTIONAL FIXTURES

## OPTIONAL FIXTURES

J-6035-070-A O PLCC IC EXTRACTION TOOL
J-6186-940-A O EXTENSION BOARD EX-326
J-6031-820-A O MULTI CONNECTOR CABLE (DIBNC)
J-6381-380-A O WIDEO CABLE (S-BNC)
1-575-065-11 O 25-PIN CONTROL CABLE (5m)

Standard
Product SOPT HEATER HS-600 (100V)
(117V)
(220V)
(240V)
NOZZLE HS-616 (for HS-600)